Public Utilities

Volume 63 No. 5 February 26, 1959

BIG GOVERNMENT AND YOUR TAX DOLLARS
By the Honorable Edward Martin

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Electric Rates, Bills, and Public Relations
Part I.
By Robb M. Winsborough

« »

America Is at the Crossroads in Nuclear Power
By Charles D. Matthews

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New York Commission Report on the Plight of Rail Passenger Service

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Public Utilities FORTNIGHTLY

VOLUME 63 FEBRUARY 26, 1959 NUMBER 5

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Big Government and Your Tax Dollars *Hon. Edward Martin* 289

This article presents Senator Martin's ideas of what safeguards must be kept to insure fiscal responsibility over all agencies of government operating in the field of business.

Electric Rates, Bills, and Public Relations. Part I. *Robb M. Winsborough* 300

Some down-to-earth suggestions, based on customer billing analysis, as to constructive steps for securing wider public acceptance and understanding of the public utility companies' rate problems.

America Is at the Crossroads in Nuclear Power *Charles D. Matthews* 307

The possibility of working out a practical plan which can still be developed if the Joint Committee, AEC, and industry will pool their ideas and activities.

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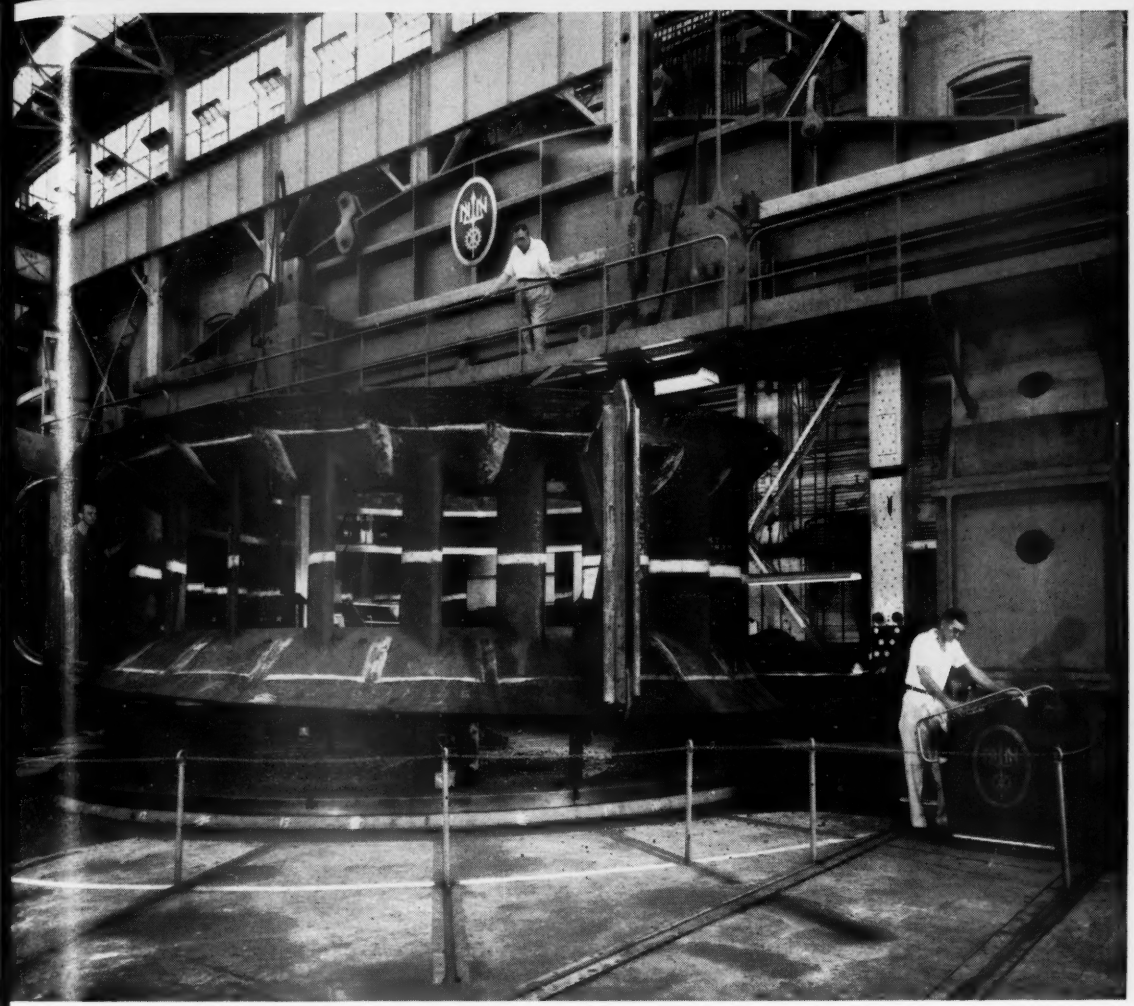
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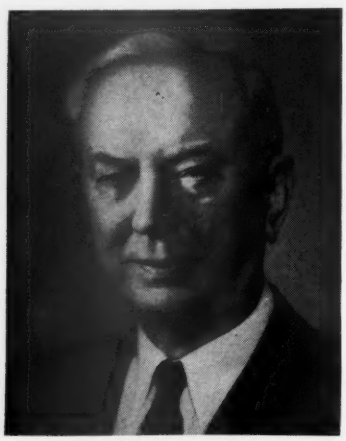
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Pages with the Editors

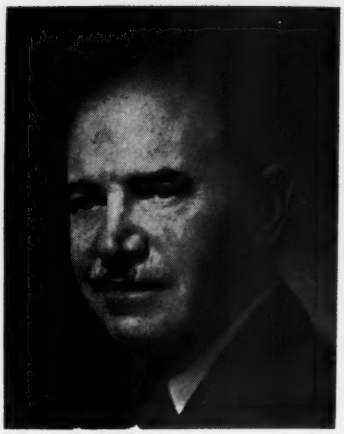
IN the pulling and hauling that have been going on in Washington over the reorganization of the new 86th Congress from the standpoint of "liberal" *versus* "conservative," we find quite a bit of confusion over words which are commonly used. One of them, "socialism," is sometimes used in a very uncomplimentary sense, especially when a so-called "conservative" is having an argument with a so-called "liberal" over spending the taxpayers' money for nondefense projects by any branch of the government.

WE are all familiar, of course, with the counterargument of the "liberals" that certain activities of the federal government in recent years, even in the nature of business enterprise, are neither socialism nor socialistic. They insist that these activities have come about in a normal, natural, and logical way, quite incidental to the major purpose of government.

WE cannot hope to do much about settling any such argument at this late date in any such small space as this department of editorial comment. But it is a commentary on the political mores of our time to note that the very words "socialist" and "socialism" are resisted and even resented by those who, at the same time, would



EDWARD MARTIN

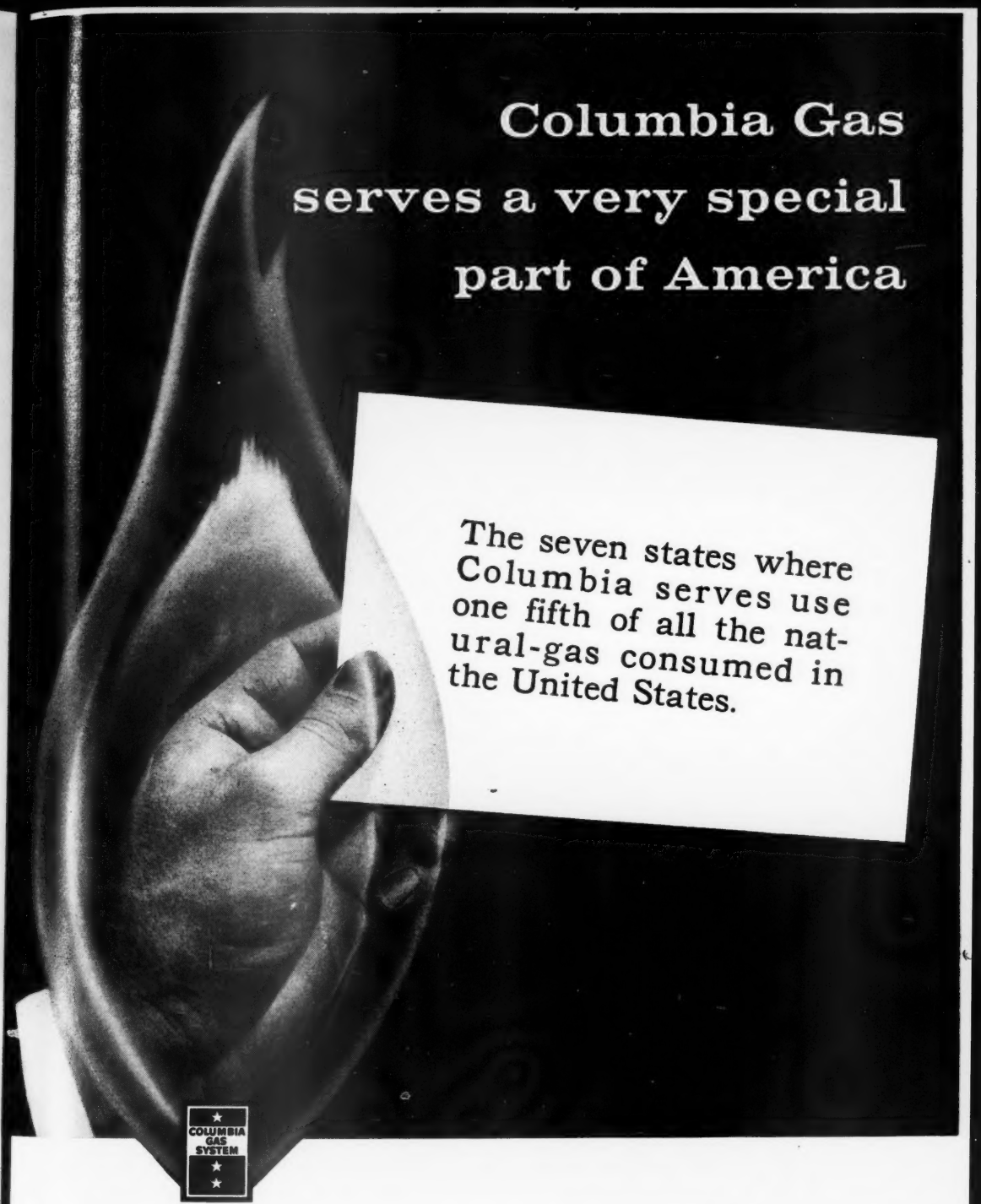


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ROBB M. WINSBOROUGH

expand federal government operations in fields which are otherwise and predominantly occupied by private business enterprise for profit.

AS is always the case of words which have deteriorated in meaning through emotional distortion, the dictionaries do not help us very much. Webster's *New Collegiate Dictionary* defines "socialism" as "A political and economic theory of social organization based on collective or governmental ownership and democratic management of the essential means for the production and distribution of goods." There are, of course, various alternative and supplemental definitions along the same line, and once we try to particularize we are off into deep waters indeed, involving such concepts as collectivism, Fabianism, Marxism, and even Bolshevism and Communism.

THE fact remains that if you were to buttonhole even the most rabid congressional supporter of expanding federal electric power project operations, he would not agree that any of this is "socialism" or "socialistic." Not since the late Representative Marcantonio of New York sat, more or less isolated, in the House of Representatives has there been a



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lawmaker who gladly owned up to an honest desire to socialize American industry through government operation—even the electric power industry, as such.

ALL this brings us right back to where we started, which is to determine whether the things that have happened and are still happening in the field of government operations are really socialistic or partially socialistic, or in danger of becoming so. In this intellectual ring-around-the-rosy, it is important to keep our eyes on the ideological ball—if we may mix our sports metaphors. What is the true purpose of such operations? Or, aside from what might have been the purpose, what is actually happening, as the result of developments which may not have been originally intended? Do we really know what we are doing, or is it another case of not knowing the gun was loaded?

ONE focal point of such discussion, which has already arisen in the new Congress, is the proposal to permit the Tennessee Valley Authority to finance its own further expansion with revenue bonds. Offhand, this would seem to be really a very sensible proposal from the taxpayer's point of view—relieving him of a burden which, through the years, has become an increasing fiscal obligation of the government.

WE present as the opening article in this issue, a very careful and critical analysis not only of the TVA proposal, but also the general trend of tax spending in this direction. It is the product of an author who for twelve years was a U. S. Senator from Pennsylvania, EDWARD MARTIN. SENATOR MARTIN was born in Pennsylvania in 1879 and graduated from Waynesburg College in 1901. After his admission to the bar in 1905, he served in all grades in the military establishment, from Private to Major General. He became successively auditor general, state treasurer, adjutant general, and governor of Pennsylvania before his election to the U. S. Senate in 1946.



CHARLES D. MATTHEWS

* * * *

ALONG a somewhat similar line of concern to the electric power industry is the two-part article (beginning on page 300) from ROBB M. WINSBOROUGH, vice president of the Middle West Service Company of Chicago. A native of Missouri, he grew up in Georgia and Texas and was educated at the Rice Institute in Houston. He has specialized in public relations and employee training after a background of journalism and oil business operations. He entered the utility business in 1929 as director of public relations for the Southwestern Gas & Electric Company of Shreveport, Louisiana. He was made commercial manager in 1935 and a director in 1937. He transferred to Middle West in 1938, taking care of public relations and employee relations. He was a World War II Army officer.

* * * *

CHARLES D. MATTHEWS, whose article on the crisis in America's nuclear power program begins on page 307, is at present a nuclear engineer accountant executive of Bozell & Jacobs, Inc., attached to the Washington office. The views expressed in his article in this issue, however, are his own and, as the saying goes, do not necessarily reflect the views of his business associates. MR. MATTHEWS is a native of Texas and a graduate of George Washington University (BA, '48; MA, '49).

THE next number of this magazine will be out March 12th.

The Editors



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(March 12, 1959, issue)

★

THE RAILROAD PASSENGER BUSINESS: ITS ILLS AND REMEDIES

A repeated and somewhat melancholy feature of daily news is the curtailment and discontinuance of railroad passenger service. Faced with increasing operating costs, tax burdens, and competition from private automobiles, the railroads have in many areas reached the point of diminishing return on passenger business. Realizing that they cannot operate profitably regardless of fare levels, they have indicated a desire to get out of the passenger-carrying business to a large extent, and in some instances to get out of it entirely. What is the impact of this on the public interest and on other utility services, particularly in the transportation field? Dr. William J. McKenna, assistant professor of economics at Temple University, has made a careful study of the ills and remedies of the railroad passenger business. He has some constructive suggestions as to what might be done to save what is left of a once essential and still important segment of our national transportation service.

ELECTRIC RATES, BILLS, AND PUBLIC RELATIONS. PART II.

In this second instalment of a two-part series, Robb M. Winsborough, vice president of Middle West Service Company, deals with public relations handling of electric rate increases. He reviews the inevitability of these increases on a large scale in view of continuing inflationary conditions. He urges a realistic approach which recognizes that while a public utility company may not be able to make a rate increase popular, it can make it more acceptable and reasonable and not something which is to be feared or which is unfair. He outlines a down-to-earth pattern of operation for the public relations man who is charged with responsibility of preparing the soil and cultivating a favorable public opinion, both before and after the filing of a rate increase.

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★

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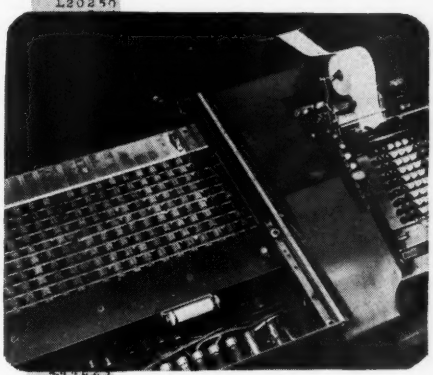
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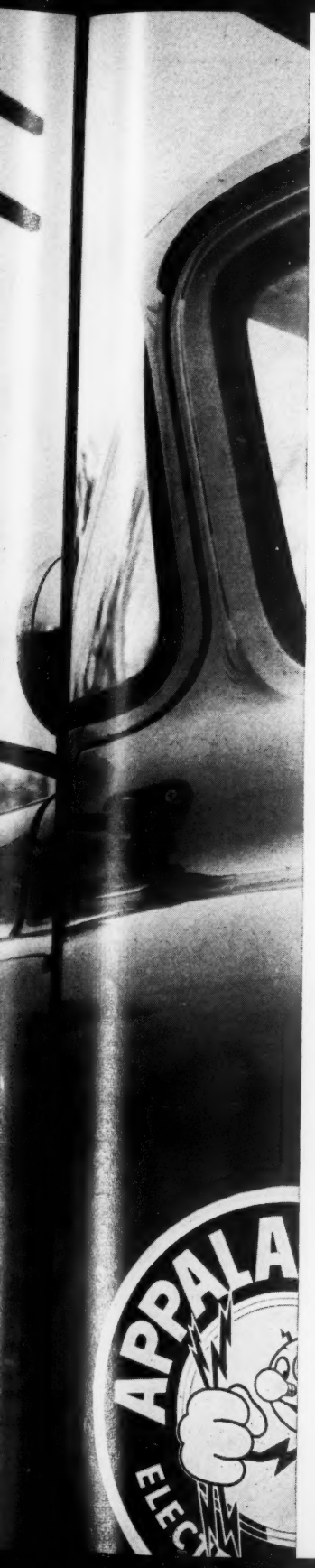
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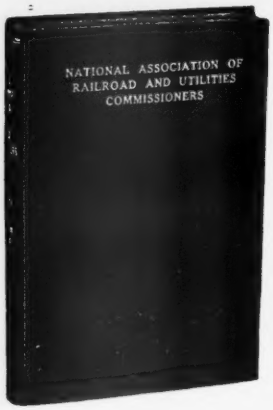
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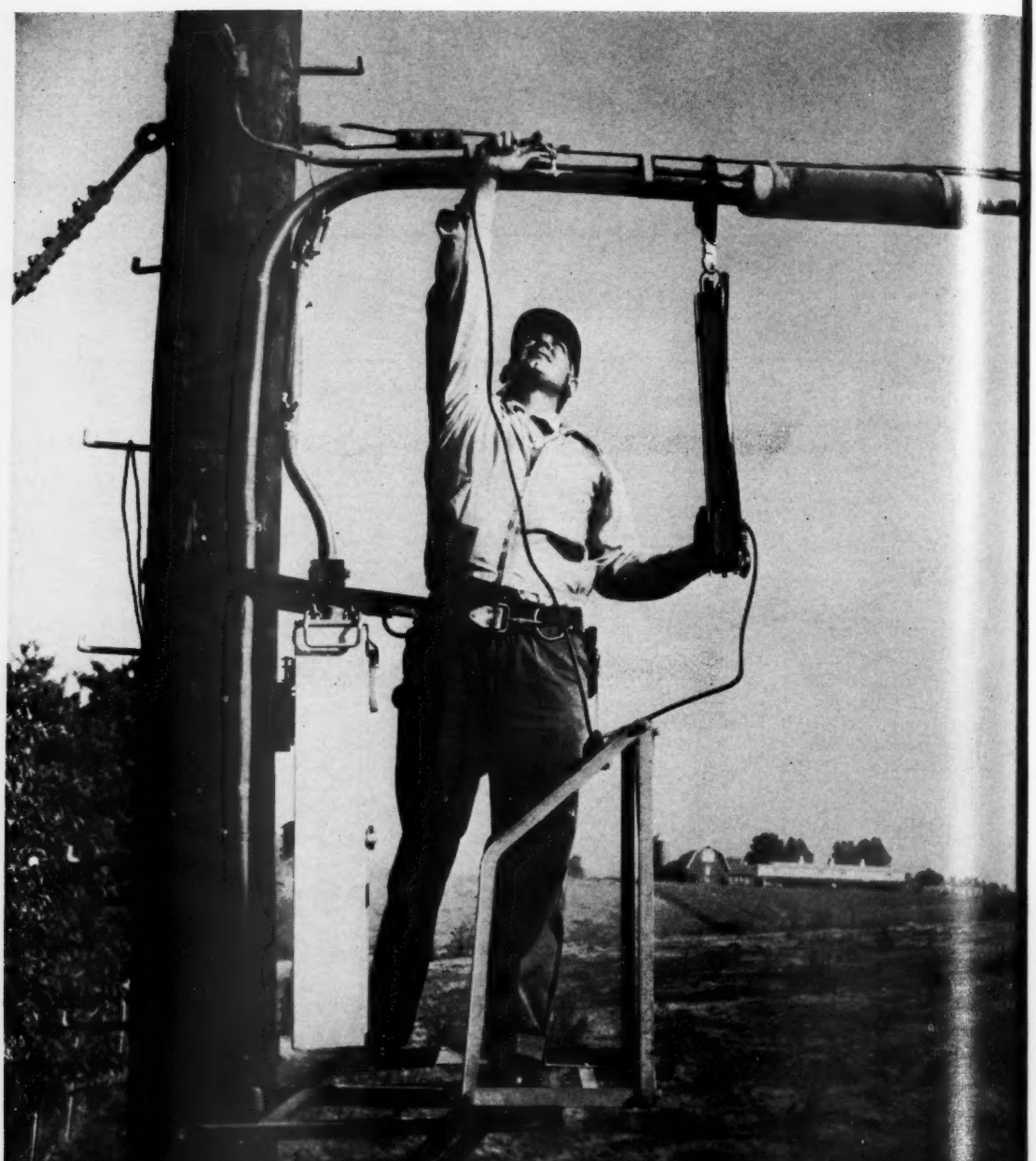
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Thursday—26 *National Wiring Sales Conference begins, New Orleans, La.*	**Friday—27** *California Municipal Utilities Association ends four-day annual conference, Berkeley, Cal.*	**Saturday—28** *National Association of Broadcasters will hold annual convention, Chicago, Ill. Mar. 15-18.* ***Advance notice.***	**MARCH** **Sunday—1** *Southern Safety Conference begins, Asheville, N. C.*
Monday—2 *Texas Telephone Association begins annual convention, San Antonio, Tex.*	**Tuesday—3** *Kentucky Telephone Association begins annual convention, Lexington, Ky.*	**Wednesday—4** *National Lighting Exposition ends, New York, N. Y.*	**Thursday—5** *Southern Gas Association begins transmission management and distribution management conferences, New Orleans, La.*
Friday—6 *National Association of Corrosion Engineers will hold meeting, Chicago, Ill. Mar. 16-20.* ***Advance notice.***	**Saturday—7** *American Water Works Association, New England Section, will hold meeting, Boston, Mass. Mar. 19.* ***Advance notice.***	**Sunday—8** *New England Gas Association will hold annual meeting, Boston, Mass. Mar. 19, 20.* ***Advance notice.***	**Monday—9** *Mid-West Gas Association begins annual meeting and convention, Des Moines, Iowa.*
Tuesday—10 *Institute of Radio Engineers will hold national convention, New York, N. Y. Mar. 23-26.* ***Advance notice.***	**Wednesday—11** *American Water Works Association, Illinois Section, begins annual meeting, Chicago, Ill.*	**Thursday—12** *Oklahoma Utilities Association will hold annual convention, Tulsa, Okla. Mar. 26, 27.* ***Advance notice.***	**Friday—13** *Gas Appliance Manufacturers Association will hold annual meeting, Bal Harbour, Fla. Apr. 1-3.* ***Advance notice.***



Courtesy, American Telephone and Telegraph Company

Trouble Prevention

Pressure of dry compressed air in a telephone cable is measured to detect leaks that might lead to rainy day troubles if not repaired.

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Big Government and Your Tax Dollars

By the Honorable EDWARD MARTIN*
FORMER U. S. SENATOR FROM PENNSYLVANIA

Both as a lawyer and as a public servant, this author has been much concerned with the trend of big government and government spending, especially in the field of electric power. The current session of the 86th Congress is almost certain to consider proposed legislation to free the Tennessee Valley Authority from congressional purse-string control by permitting it to finance its own expansion. There is also the possibility that the present geographical service area of TVA may be expanded. This article, therefore, is a very timely analysis of a problem which affects every taxpayer in the nation.

I HAVE just completed twelve years as United States Senator from the state of Pennsylvania. A lawyer, I have been active in my profession and in public life for half a century. In my native state of Pennsylvania, I have held various public offices, including the governorship.

My first term in the United States Senate started in 1947; I called it a day in 1955 when I decided not to stand for re-election. My term ended officially on January 2, 1959.

My experience in public service, especially in Washington during a period of rapid industrial and governmental expansion, has been rewarding. It certainly has been educational. It also has raised many questions in my mind as to the wisdom of some of the steps taken by our national government, especially those resulting in continuing growth of huge federal budgets, the mounting burden of taxes, and continuation of inflationary trends.

CONGRESS seems to have lost control of the nation's purse strings, and

*For additional personal note, see "Pages with the Editors."

to be little inclined to do anything about it. Deficit financing, in good times or bad, is accepted. An overwhelming driving force tending toward even greater concentration of power in Washington continues because of indifference of the majority of citizens to having their lives regulated, subsidized, and otherwise imposed upon. Changes in national policies are bringing about a revolutionary transformation in our system of government.

The result finds expression in mounting debt and an almost unbearable burden of individual and corporate taxes to support it. Let us look at a few figures. In 1930, federal taxes totaled $3.6 billion; by 1958 they were 22 times as much. In 1930, the federal debt was $16 billion; in mid-1959 it will total over $283 billion. With an estimated federal deficit of $12 billion for fiscal 1959, the federal statutory debt limit will probably have to be raised to upwards of $290 billion. The seriousness of this rising debt becomes apparent when it is realized that in 1958, for the first time in our history, Congress was twice forced to raise the statutory debt limit. One unavoidable result will be to set loose further inflationary pressures and erosion of dollar values—paid for out of every man's pocket.

IN the Senate, I have served on the Finance, Public Works, and Appropriations committees. From this front seat one can observe the way in which government has, step by step, been pushed into expensive and far-reaching programs. These, in many cases, take over the responsibility of private business, with ventures costly to every taxpayer.

The people of this country have not been adequately informed as to the extent of these programs, the methods used to justify them, and their impact on our citizens as taxpayers. There is great need for public understanding of the inevitable consequences if federal budgets of vast proportion continue to be forced further out of balance by national policies and legislative proposals promoting unnecessary or extravagant expansion of federal activities. This applies to the majority of the many undertakings in which government participates, especially to what is going on in the development of our natural resources. Some of them are downright injurious to important segments of our people.

Taxpayers Forced to Finance Big Federal Businesses

IN recent years, taxpayers have, by reason of the action of Congress, been forced into becoming big investors in a large number of business undertakings. They have no voice in the conduct of these businesses. The only protection they have in preserving their stake in these projects is through congressional control by the Congress of the federal agencies involved, and I have been surprised and deeply concerned over the willingness of some of our legislators to forego their responsibility to safeguard the interests of the taxpayers who have made these projects possible.

What has been going on is that we have been steadily following policies patterned after socialistic concepts. The people of this country, when asked by the opinion survey interviewers, say they do not want socialization of their institutions. Nevertheless, such a change is taking place slowly and relentlessly, without the voters ever having a chance to approve or disapprove.

Federal Competition Inequitable

THE need for congressional supervision of the commercial activities of the government is especially urgent because the sovereign state never competes with its citizens on equal terms. It arrogates to itself special privileges which make it an invincible competitor in any field it may choose to enter. Federal undertakings pay no federal income taxes, and little or no state and local taxes. They obtain their capital needs without going to the free money market, at far less cost than is possible for ordinary business concerns. Many of them can allocate parts of the total cost to so-called nonreimbursable purposes, which simply means that the taxpayers as a whole pay the bill, and not the beneficiaries of the purpose. They are free of the need to make both ends meet, for the taxpayers pay all deficits.

Obviously, the government's commercial undertakings, unless closely controlled, can drive private enterprise out of business.

Background of TVA

PERHAPS the federal agency which has had the most attention is the Tennessee Valley Authority. I shall use it as an illustration.

TVA is the largest single business undertaking of the federal government; it has cost to date over $2 billion.

Financed by federal taxpayers all over the nation, it concerns everyone.

The largest integrated power system in this country, it also owns and operates a substantial fertilizer and chemical business, a flood-control and navigation system, extensive recreation facilities, and carries on considerable conservation and area development work.

Because of recent attempts to change TVA's relationship to the federal government, I have studied with considerable care and brought up to date the information available on its composition, operations, and future needs.

Stated purposes of the Tennessee Valley Authority Act of 1933 were to improve the navigability and to provide for the flood control of the Tennessee river, to create a corporation to operate the government properties at or near Muscle Shoals, and to provide for the agricultural and industrial development of the Tennessee valley.

TVA started off with the government hydro and steam stations at Muscle Shoals which had been built during

¶ "THERE is serious doubt that TVA had the constitutional right to build steam-electric stations for commercial purposes. This question has never been resolved. Under the procedure that obtains in our courts today, it would take a resolution by the Congress to get the matter before a federal court. Such a resolution was introduced but was voted down. It is unfortunate that the necessary legislation failed to pass, for it might have resolved a broader constitutional question that remains unanswered to this day. That question is whether TVA (or any other federal body for that matter) has the constitutional right to engage in a business undertaking such as furnishing electric power and, in so doing, to assume the responsibility for serving in perpetuity the power needs of a particular area."

World War I to make nitrates for explosives. It acquired some steam and hydro power plants by purchase. A steam-electric station was built during World War II as a defense measure and it became part of the TVA power system.

Starting with Norris hydroelectric station, TVA proceeded to build a series of multipurpose and single-purpose dams which, in many instances, combined power, navigation, and flood control in single structures.

The authority made a trade with the Aluminum Company of America and added the capacity of the Little Tennessee hydros to its system. It uses this power and energy, together with the storage capacity of the Aluminum Company's dams, to carry its own load. In turn, equivalent energy is provided, at high load factor, to the Aluminum Company.

Agency's Goals Attained in 1948

BY 1948, all of the primary purposes for which TVA was established had been accomplished—navigation had been provided over the entire course of the Tennessee river from Knoxville to the river's mouth; all the major dam and reservoir sites had been developed and the maximum degree of flood control achieved; substantial agricultural and industrial development had taken place and the federal government had located certain of its more important atomic energy projects in the TVA area.

This was the picture just about one year after my first term started. At that time, as of June 30, 1948, the taxpayers had put up some $910 million for this vast program. Of this sum, about half was in electric power assets, leaving $460 million as the cost of all its other operations.

TVA was at a turning point. It had some steam plants that had been built for national defense, and it acquired some others in the course of buying up existing utilities. But it had not built any steam-electric stations primarily for its own use.

Starts Building Steam-electric Plants

THERE is serious doubt that TVA had the constitutional right to build steam-electric stations for commercial purposes. This question has never been resolved. Under the procedure that obtains in our courts today, it would take a resolution by the Congress to get the matter before a federal court. Such a resolution was introduced but was voted down. It is unfortunate that the necessary legislation failed to pass, for it might have resolved a broader constitutional question that remains unanswered to this day. That question is whether TVA (or any other federal body for that matter) has the constitutional right to engage in a business undertaking such as furnishing electric power and, in so doing, to assume the responsibility for serving in perpetuity the power needs of a particular area.

TVA resolved these doubts by going ahead anyhow with a new commercial steam-electric plant at Johnsonville, and has since built a large number of similar plants. Today it is predominately a steam-electric power system.

The original attempt, made in 1947 to appropriate money to start construction of the Johnsonville plant, failed. In 1948 the measure passed. At the time, I felt TVA had completed its task, assigned under the act creating it, and there were better ways available by which area power needs could be met without further major expenditures of tax funds.

One would have been by requiring TVA to free local municipalities from the stringent provisions of its "sole supplier" clause, thus enabling municipalities to use their own financial resources to meet their future power needs by building their own facilities.

THE practicability of this plan has been proved just recently. The city of Memphis is now completing a large power plant and announces it will supply all the present and future needs of its citizens.

If this plan had been followed ten years ago there would be no TVA problem today.

Like many federal activities, TVA was determined to expand beyond its stated purposes. It went ahead with more and bigger steam plants. It added a few minor hydros, and put in additional units at some of its existing dams.

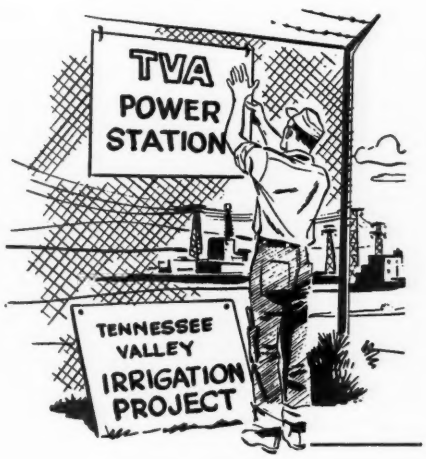
Territorial Limits Violated

DURING the war, the Army Engineers started to build some multipurpose projects in the Cumberland basin. The first unit of the first station went into service in 1948; units have been added ever since. TVA purchases the entire power output of these dams and directs their operation for its own purposes. Appropriations to date for these projects exceed $220 million. While this amount is not included in TVA's accounts, it nevertheless represents a substantial part of the total contribution which the taxpayers have made to this federally supported power business.

In pushing ahead in this way, TVA bridged another serious constitutional question. For a long time TVA itself believed it had no right to build plants outside of the Tennessee valley. But it went ahead anyhow and did so, and by default this territorial limitation was overridden. TVA never accepted the idea it might also

TVA's Need for Expansion Questionable

"IN the hearings before the House Committee on Public Works, testimony based on TVA's reports to the Federal Power Commission and on AEC data, was presented that indicated no urgent need for additional power at this time. TVA's own records of its sales to the federal agencies prove that the defense agencies have leveled off as predicted and therefore they are not to be considered an important factor in future growth of TVA's power business. It is obvious the extent of TVA's future need for additional power facilities has been vastly overstated."



have a service area limitation. It has expanded far beyond the Tennessee river basin, until today half its area is outside the Tennessee valley.

With territorial limitation as to construction of power plants eliminated by default and no finite geographical area, TVA today is in the position of being able to continue to reach out at will into areas adequately served, limited only by its ability to get money for construction.

The result of this enlargement of its activities shows a striking change over the situation of only ten years ago. As of June 30, 1958, the net appropriations, transfers of property, and retained earnings applicable to TVA totaled slightly over $2,250 million. Of this amount, a little over one-half billion dollars was in its operations other than power—not much more than there was in 1948. The big change was in the power assets—about $1.7 billion—nearly quadrupled in a decade.

Attempt to Muzzle TVA Critics

ONE of the serious aspects hampering sane discussion of the TVA problem has been the frantic efforts of some of its supporters to muzzle discussion of issues raised by federal intrusion in the electric power business through the time-honored, normal way of paid advertisements.

They have succeeded in invoking a new interpretation of the Internal Revenue Service regulation that money spent for advertising, "for lobbying purposes, for the promotion or defeat of legislation, or for the development or exploitation of propaganda" cannot be considered "ordinary and reasonable expenses" deductible for tax purposes.

The Saturday Evening Post editorially on June 21, 1958, exposed what has been taking place by posing the question, "Should the Power to Tax Include the Right to Censor Advertising?" The *Post* pointed out that for many years the nation's independent electric power companies had, through advertising, promoted wider use of electric power and supported the thesis that investor-owned utility companies, as compared with government-owned plants supported by the taxpayers, should provide electric service. If stating the advantage of being served by a tax-paying company in this fashion constituted "propaganda," it certainly represented an attitude thoroughly acceptable to millions of Americans, observed the magazine.

In contrast to the mild and general advertisements which evoked the ruling of the Internal Revenue Service, proponents of TVA have gone to great lengths in distribution of propaganda directly favoring legislation under consideration by the Congress. Illustrative of these efforts was the appearance on August 5, 1958, of a full-page advertisement in *The Washington Post and Times Herald,* urging favorable action on legislation affecting TVA, which at that very moment was before the Congress.

Need for More Power Doubted

ANOTHER serious aspect that tends to prevent objective consideration of the TVA problem is the difficulty of obtaining accurate vital information. An air of urgent need for vastly more power facilities runs through all TVA statements and those of its proponents. This "need" simply is not borne out by the facts.

The claim is made that the power use

in the TVA area is growing at the rate of 750,000 to 800,000 kilowatts a year. TVA's postwar expansion came first from an unprecedented past increase in power use by the Atomic Energy Commission and, second, from increase in power use by other customers. AEC has announced its use of TVA power would be curtailed. Further, it says no large increase in power needs is foreseen. The record shows TVA's total load rose from a peak of 2.1 million kilowatts in fiscal 1948 to 9.4 million in 1958. This is a total gain of 7.3 million kilowatts. Included in these figures, however, is an AEC rise of 3.5 million kilowatts, so that the increase from all other TVA power users comes to just 3.8 million kilowatts—an average yearly increase rate of 380,000 kilowatts and about half the amount of the load growth claimed.

IN the hearings before the House Committee on Public Works, testimony based on TVA's reports to the Federal Power Commission and on AEC data, was presented that indicated no urgent need for additional power at this time. TVA's own records of its sales to the federal agencies prove that the defense agencies have leveled off as predicted and therefore they are not to be considered an important factor in future growth of TVA's power business. It is obvious the extent of TVA's future need for additional power facilities has been vastly overstated.

The February, 1958, peak demand of the TVA load, including a large amount that can be interrupted, was 9.4 million kilowatts. TVA's power resources were about 10.9 million kilowatts at that time, which represented a margin of 1.5 million kilowatts, or nearly 16 per cent.

Scheduled additional capacity will raise TVA's power-generating potential by the end of 1960 to 13.4 million kilowatts. What this means is that by 1960, after due allowance for outages, there will be available in 1959 and 1960, additional power generation facilities sufficient to take care of better than three million kilowatts of actual new customer loads—probably enough to take care of five years' development throughout the TVA area.

TVA has stated repeatedly that it needs to sell revenue bonds to finance its immediate needs for expanding its power facilities. There seems to be some question as to the accuracy of these statements.

At the end of the fiscal year 1958, TVA admitted to having $66 million of

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cash on hand. In the next three fiscal years it should generate at least $300 million out of its business. Thus the available money for construction and repayments under the law would be about $366 million. TVA admits that it needs only $171 million to complete the power work authorized and under construction. The money supply seems abundant to meet construction needs and repayment obligations.

Deceptive Tax Payment Publicity

TVA publicity has certainly attempted to convey the impression that it pays adequate amounts in taxes to state and local bodies.

Here again the facts are otherwise. Actually, TVA pays no state and local taxes in the places it does power business. Instead, it makes a token payment "in lieu of" such taxes, using an out-of-date formula which takes account of its power receipts but excludes entirely the income from power sold to the federal government. By this exclusion device, the tax-paying citizens of Tennessee and other places where TVA does business are being shortchanged. It illustrates, too, how the overriding force of the federal government can exert a harmful and unreasonable influence.

But, in fairness, let me say that when this tax treatment was first worked out it did not make much difference, perhaps, to the people of Tennessee and their neighbors. TVA's power sales to the federal government then were only a small fraction of the total business. So their exclusion from the tax determination was insignificant. But today, with the federal agencies taking 51 per cent of TVA's energy sales, the situation is very different. The result is tax bodies of the Tennessee region are sustaining a substantial loss year after year.

I HAVE made some estimates of what this loss might be. If TVA were to pay state and local taxes under the formula presently in use but on all its business, including that which it does with the federal government, it would have paid some $11.7 million. This is in sharp contrast to the $5.3 million it reported for fiscal 1958.

Further investigation, however, indicates that even if this formula, set about twenty years ago, is extended to include all TVA's power business, the resulting amount would be far short of sums actually being paid today by utilities of comparable size. Compiling the amount of such taxes for TVA's neighbor companies (with total net plant accounts about equal to TVA's), I find these neighboring utilities paid over $36 million in taxes other than federal income taxes—benefits properly belonging to local tax bodies which under TVA they are not now realizing. This loss goes on and on each year, to the detriment of local tax-supported functions, such as schools and other services.

NOT long ago, at the direction of the general assembly of Tennessee, a thorough survey was made of the state's school needs to provide for sound planning for future educational needs and to serve as a basis for legislative recommendations to the 1959 general assembly. The survey recommended increases of $29 million as needed in the public school operating expenses for the 1959-60 fiscal year, $25 million going for teachers' salaries. How helpful would be these additional taxes, which could be obtained if proper amounts were paid by TVA, in meeting

the financial problems faced by the people of the Tennessee area. Equitable recognition by TVA of its local tax responsibilities would go a long way to solve this problem.

Congressional representatives of Tennessee have always been most solicitous in behalf of their constituents on the subject of TVA. And so I find their evident failure to demand just and reasonable local tax payments from TVA to be strange indeed.

Escapes Big Federal Taxes

TVA's tax deficiency becomes even more pronounced when one looks at the federal income tax that TVA escapes, again in contrast to its tax-paying neighboring utilities. Equity in relations with government is an entitlement of every citizen. Taxes become part of the price of all goods and services, paid by the customer. Equitable tax treatment of the users of power demands they should not in one instance escape completely from bearing their fair share of costs of government in the rates paid while others have such burden imposed. Again looking at the tax-paying utility companies adjacent and comparable to TVA as a means of measuring TVA's tax deficiency, I have found this "loss" to be over $47 million a year.

A distinct impression is given by federal power proponents that power revenues of TVA are paying all of TVA's expenses, and a profit besides. The facts are that TVA's other operations—navigation, flood control, and fertilizer business—are operated at a heavy loss. TVA's

Costly Federal Activities Usurp Business Responsibilities

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"The people of this country have not been adequately informed as to the extent of these programs, the methods used to justify them, and their impact on our citizens as taxpayers. There is great need for public understanding of the inevitable consequences if federal budgets of vast proportion continue to be forced further out of balance by national policies and legislative proposals promoting unnecessary or extravagant expansion of federal activities. This applies to the majority of the many undertakings in which government participates, especially to what is going on in the development of our natural resources. Some of them are downright injurious to important segments of our people."



financial statements for the fiscal year 1958 show the losses after operating expenses and depreciation totaled over $186 million. These, of course, did not include the cost of money to the federal government or any payments in lieu of taxes at the federal, state, and local levels. Nearly one-fifth of TVA's assets are in undertakings operating at an admitted loss.

TVA Earnings Distorted

TVA has said again and again that it has been earning 4 per cent on its net plant, and its latest report shows total net earnings from power operations to June 30, 1958, of $468,412,305.

Under law, TVA is required to make certain payments into the Treasury of the United States from its net power proceeds. Up to June 30, 1958, these payments, in respect to power operations, had totaled $250,131,519.

Although the 1948 act calls for repayments to be made out of net income, TVA does not indicate this on its books of account. Obviously, the same money cannot be used for both purposes. If the transaction had been handled as the act provides, TVA's return over the years is in reality only about 1.85 per cent, which is less than the 2 per cent interest rate claimed by TVA supporters to be proper.

The claim is sometimes made that these same net earnings are the equivalent of federal income taxes. It is also claimed at other times in repetition that the net earnings constitute a return on investment, that they represent amortization, or that they serve as interest on the taxpayers' investment. It is obvious that this cannot be so for they are wholly inadequate for all these purposes.

One frequently hears assertions that "TVA is fully self-supporting." These claims are not true. Clear-cut unbiased factual information on this important phase of TVA's operations is badly needed.

Unfair Contender for Industry

I COULD not conclude my observations about TVA without considering it in perspective to the people of Pennsylvania; what I have to say in this regard applies also with great force elsewhere in other states.

For a number of years, a large section of Pennsylvania has been beset by the decline in the coal industry, plaguing our commonwealth's mining areas and forcing hardship on its communities. The people in these hard-hit areas have been making strenuous efforts to overcome this economic obstacle, trying in every way to work out their industrial salvation. They are devoting substantial sums in individual time and money to bring in new industrial establishments and to enlarge existing ones.

But their problem is made difficult by the unfair and preferential treatment enjoyed by TVA when they are competing for location of new industry.

The inequity of the situation is further compounded when it is realized that these same citizens have been forced into the position not only of meeting this unreasonable competition but also of helping to finance it. The people of Pennsylvania have contributed some $150 million of the more than $2,250 million that has been poured into TVA. What the people of other states have furnished is a matter of record and should be of concern to them and to their representatives in the Congress.

Never Submitted Long-range Plans

IN my twelve years in the Senate, I do not recall that TVA ever has presented to Congress a long-range construction program, outlining power plants and transmission lines it intends to build, justifying need for them, what they will cost, and where the money will come from.

Business finds such forecasts essential for proper conduct of its affairs. These programs are seldom less than five years in length; in some cases they look into the future as much as twenty-five years. TVA requests for money, and its plans, have been on a short-term basis only. The legislators have had no indication of the implications of the appropriation they are asked to approve.

If the authority had fully informed Congress of its long-range plans, Congress would have had ample opportunity to study and approve them; the annual political battle over appropriations would have been avoided. TVA would have been removed from partisan politics to the relief of every taxpayer.

THE people of this country and their representatives are entitled to full information as to future plans and prospects of the big business operations of their government. Congress cannot do an intelligent job in framing new legislation unless it does have this vital information—it should not move until it gets it—and had adequate time to consider the data and their implications.

Tighter Controls Needed

WHAT I have stated here does not mean I believe TVA should be done away with. TVA as it stands today has developed far beyond expectations. In many respects, TVA has become quite a different undertaking than what was originally contemplated when the TVA Act was passed. We must give practical consideration to the facts as they presently exist and find a realistic solution to the problem of supplying the power needs of the TVA area in terms of adequate service to the people within the area; in terms of necessary facilities to provide such service; in terms of financing the required facilities by appropriate measures under congressional control; and, at the same time, in terms of full protection for the taxpayers of the country whose money is being used to finance TVA.

There are many other federal commercial projects where the confusion and misunderstanding are as great. If we are to hold the line on inflation and control the size of future federal budgets, it is essential that these enterprises be considered as they are, not as someone imagines them to be. Their full cost—past, present, and future—must be appraised in a realistic, factual manner before any new legislation is adopted.

Congress must retain and strengthen its control over government enterprises and see that they are operated soundly and fairly in the best interests of their owners, who are all of the people of the United States.

Electric Rates, Bills, and Public Relations



PART I

Here are some persuasive facts and figures showing there is a direct relationship between the cost of electric service and what the customer thinks about electric utilities. Also, that leadership groups are strong forces in molding public opinion. A proven technique, called "Customer Bill Analysis," is given for counteracting customer criticism.

By ROBB M. WINSBOROUGH*
VICE PRESIDENT, MIDDLE WEST SERVICE COMPANY

SOME electric company managements are taking a closer look at their public relations programs because of two disturbing things which they see:

1. There is growing criticism of the cost of electric service. This criticism is becoming strong among the opinion-influencing segment of the company's customers. Loss of good will in this opinion-influencing group is a serious public relations loss which may forecast other difficulties.

2. Unless there is a reversal of inflationary forces, which seems unlikely, many companies will be forced to ask for further electric rate increases. Serious public relations problems will be raised which will require specialized handling.

In this article I shall deal with the increasing criticism of cost of electric service among members of the influence group, the significance and public relations effect of this, and the implications of the trend. In Part II I plan to discuss the second point listed above.

UTILITY people whose duties have required them to closely follow municipal and government ownership fights have known for years that there is an important relationship between the attitude of customers toward the cost of electric service and the way these people vote on government ownership. People who are critical of the cost of electric service *tend* to favor government ownership. People who are favorable toward the cost of electric service *tend* to favor private ownership.

If you make a public attitude survey in a town that is disturbed by agitation for

*For additional personal note, see "Pages with the Editors."

some form of government ownership, you will almost always find that the people who favor government ownership are more critical of the cost of electric service than those who are against government ownership. Sometimes the differences are so extreme that it is hard to believe the survey, but rechecks bring the same results.

You will sometimes find that the people who are favorable on the cost of electric service are in favor of company ownership by a ratio of 6 to 1 while the people who are critical of the cost of electric service may favor government ownership by a ratio of 3 to 1.

MOREOVER, if you make a survey in a town that has not been disturbed by agitation for city or government ownership, you find the same general relationship between attitude toward the cost of electric service and preference for private or government ownership.

In such an undisturbed town, all people surveyed are on the same electric rate and they have not been recently influenced by propaganda. If you ask these people two questions, one about cost of electric service and one about attitude toward private or government ownership, you will find the same general relationship. Among the people who favor city or government ownership the criticism of the cost of electric service will be higher than among the group of people who are opposed to city or government ownership.

Results of this sort have been obtained in so many surveys in so many towns, both disturbed and quiet, that it is no longer a matter of anyone's opinion as to whether this relationship exists or not. It exists, and its effect is powerful in determining the outcome of elections on private *versus* government ownership.

What People *Think* Is Key Factor

THE actual level of electric rates is not usually the controlling factor in these situations. The controlling factor is what the people *think* of the rate. What they think about reasonableness of the cost of electric service is far more important than the actual rate level. This is not to say that exceptionally high rates would not provoke trouble—they would. But within the normal range of electric rates in the United States today, the actual level of the rate has less to do with the attitude of the public toward the company than what the public thinks about the reasonableness of the cost of service.

One dramatic proof of this shows up repeatedly. There are several large companies which have uniform residential rates over quite large areas. Surveys in these areas repeatedly turn up wide variations in criticism of the cost of electric service, although the rates are identical. Criticism may vary from as low as 5 per cent to as high as 60 per cent in different towns on the same rate.

What people *think* about the cost of electric service is vital in determining the state of the company's public relations.

Influence Leaders Important

ONE thing which influences how the public thinks about the cost of electric service is the way the influence group thinks. This influence group is composed of the natural centers of leadership in the town, the individuals to whom others come for advice and information. In case of an election on government ownership, these

influence leaders will exert a very considerable effect upon the outcome because their normal followers will come to them for advice, or at least to discuss the matter. Because of this, the attitude of the influence group can sometimes be critically important in determining the outcome.

Very often, but not always, the influence leader has somewhat more income than the people who come to him, or her, for advice and information. One effect of this is that the influence leader frequently has more electrical appliances than his followers, and has a larger electric bill.

The way the influence leader feels about his electric bill will affect, if not determine, his attitude for or against private ownership. If he is pleased with his cost of electric service, he will tend to favor private ownership. If he is displeased with his cost of electric service, he often tends to oppose private ownership.

There are many other issues in any government *versus* private ownership agitation. All of them have some importance and several of them may be of large importance in any particular fight. But in all situations, the way the influence leaders feel about the cost of electric service will have an effect, favorable or unfavorable, on the company's cause.

Disturbing Survey Results

WE used to think, with some reason, I believe, that almost all of the people who used lots of electric service tended to be very good friends of the company. I believe this is still true for a great many of our biggest residential users, but there are disturbing signs that it is becoming less so.

Central Surveys, Inc., of Shenandoah, Iowa, has collected a wealth of survey information relating to this and allied public attitude subjects. One of the studies embraces 754 families from whom the surveyors got (1) their opinion on the cost of electricity, favorable or unfavorable; (2)

TABLE 1

PERCENTAGE OF RESIDENTIAL CUSTOMERS EXPRESSING CRITICISM OF COST OF ELECTRIC SERVICE GROUPED BY APPLIANCE OWNERSHIP AND SUBDIVIDED BY SIZE OF ELECTRIC BILL

Customer Groups According to Appliance Ownership	*Size Of Bill*	*Per Cent of Group Expressing Criticism of Electric Service Cost*
Group 1—No major appliance and no TV	$1 to $ 4	18%
	Over $ 5	46
Group 2—No major appliances but 100% have TV	$1 to $ 6	22
	Over $ 6	52
Group 3—Have range only and 84% have TV	$1 to $ 6	22
	$7 to $11	44
	Over $11	62
Group 4—Have air conditioner only and 91% have TV	$1 to $ 7	14
	Over $ 7	65
Group 5—Have water heater or dryer only and 94% have TV	$1 to $ 8	33
	Over $ 8	62
Group 6—Have two major appliances and 90% have TV	$1 to $ 8	22
	$9 to $12	45
	Over $12	54
Group 7—Have three or more major appliances and 90% have TV	$1 to $12	24
	Over $12	48

the customer's estimate of his or her most recent electric bill; (3) use or nonuse of the the following appliances: ranges, water heaters, clothes dryers, air conditioners, and television sets.

The estimated electric bills reported by the customers showed a few that were obviously wrong when compared to appliances owned, but the entire sample had a distribution of electric bills reasonably close to the actual bill distribution of the company. Some customers could not recall the amount of the bill, and no amount was assigned to them. There are undoubtedly some errors in some customers' estimates of their bills, but even so, with these possibilities of error, the overall result of this investigation is trustworthy and it is worth serious attention.

IN Table 1, page 302, the customers have been grouped according to the appliances owned, and then subdivided into subgroups by size of bill. For each size of bill subgroup, the tabulation shows the critical portion of the group.

This table shows, in general, that as the size of the bill increases the amount of criticism tends to increase. There have been other studies which pointed to the same conclusion. One of the large companies in the past two years reported finding an almost direct relationship between annual kilowatt-hours used and critical attitude toward residential electric service costs. Table 2, this page, shows the relation between annual kilowatt-hour usage and unfavorable attitude toward electric service cost in six operating areas of another large company.

An additional study with the same import was supplied by Central Surveys, Inc., in preparation for a panel discussion at the Electric Company Public Information Program (PIP) Workshop, held in Minneapolis on October 2, 1958. Table 3, page 305, shows the relationship between size of electric bill and critical attitude toward cost of electric service in three different companies.

EACH of these three studies points toward the same general conclusion: There is a fairly direct relationship between increasing size of electric bill and increasing amount of criticism of the cost of electric service.

Table 1 contains another implication of serious interest. Close examination of this table shows that the size of the bill about which the customers do not complain excessively increases with the number of appliances owned. The most obvious explanation of this would seem to be that these customers realize they are making wide use of electric service and hence a somewhat larger bill is not unreasonable and therefore not objectionable. This explanation runs into trouble when the bill becomes so large as to seem unreasonable to the customer. Table 1 clearly shows this effect. Customers with many appliances begin to be critical of the cost of electric

TABLE 2

Relation of Annual Residential Kilowatt-hour Usage and Unfavorable Attitude toward Cost of Residential Electric Service

Operating Area	*Average Annual Residential KWH Usage*	*Average % Unfavorable Attitude*
1	2,351	18%
2	2,964	18
3	3,124	21
4	3,743	23
5	4,159	27
6	4,823	28

How "Customer Bill Analysis" Works



"THERE is a tested and documented procedure which does counteract the increasing criticism of cost of electric service. At the same time, the procedure changes attitudes on government ownership and makes customers more favorable to private ownership.

"This technique is known as 'Customer Bill Analysis.' It consists of training a suitable number of employees, either regular or special, and sending them out to talk to customers at length about the customer's own electric bill. In the conversation the employee shows the customer how the electric bill can be reduced to the cost per day. The employee then also shows the customer how many ways the customer uses electric service. When the customer realizes the full extent of his use of electricity and sees the modest daily cost, the usual reaction is one of astonishment. The effect, in almost every case, is to eliminate the feeling that electricity costs too much."

service when the bill gets much over $7 or $8.

One other possible explanation of this fact is the relationship which the electric bill bears to the average monthly family income. We do not now have, or at least I am not acquainted with, any data which show the relation between monthly family income, size of electric bill, and per cent of criticism of the cost of electric service. Collection of this sort of data might be of great value in helping us to see more clearly the difficulties we shall face in continuously increasing the average size of residential electric bills.

Criticism Mounts as Bill Rises

A GREAT deal more data might be presented to reinforce the meaning of the three previous tables, but it does not seem necessary to use additional space for it here. The central finding is well documented: there is a close and important relationship between the size of the electric bill and the attitude of the customer toward reasonableness of the cost of electric service. The higher the bill, the more likely for the customer to be critical.

Because the influence group in any town contains so many people of more than average income, this influence group also contains more than average proportions of high electric bills. It is this fact that is causing influence groups in some towns to become increasingly critical of the privately owned electric companies, and to become more susceptible to the propaganda claims of the co-op and government ownership advocates.

In the face of this situation, is there anything the electric company can do, practically, to change the trend of increas-

TABLE 3

RELATIONSHIP BETWEEN SIZE OF ELECTRIC BILL AND PER CENT OF CUSTOMERS EXPRESSING CRITICISM OF COST OF ELECTRIC SERVICE

	Per Cent Critical of Electric Service Cost		
Size of Bill	*Company A*	*Company B*	*Company C*
Bills $5 or Less	12%	10%	—
Bills $6 to $10	19	16	12%*
Bills $11 to $15	36	32	26
Bills over $15	42	48	27

*Bills for $10 or less. Company C did not have $5 or less breakdown.

ing criticism of electric rates and the accompanying increase in susceptibility to government ownership propaganda?

Fortunately, the answer is a resounding "YES."

Customer Bill Analysis Helpful

THERE is a tested and documented procedure which does counteract the increasing criticism of cost of electric service. At the same time, the procedure changes attitudes on government ownership and makes customers more favorable to private ownership.

This technique is known as "Customer Bill Analysis." It consists of training a suitable number of employees, either regular or special, and sending them out to talk to customers at length about the customer's own electric bill. In the conversation the employee shows the customer how the electric bill can be reduced to the cost per day. The employee then also shows the customer how many ways the customer uses electric service. When the customer realizes the full extent of his use of electricity and sees the modest daily cost, the usual reaction is one of astonishment. The effect, in almost every case, is to eliminate the feeling that electricity costs too much.

IT is difficult for utility executives who have not seen the results of this activity firsthand to believe in it very strongly. On the other hand, it is hard to overstate the satisfaction which utility executives feel when they see this process applied in one of their own troubled spots and find out for themselves the enormous improvement in public attitude which results from it. Not only does the process reduce the complaint about cost of electric service. It does much more: If it is accompanied

TABLE 4

ATTITUDE OF THE PUBLIC ON MUNICIPAL OWNERSHIP SHOWING THE SENTIMENT BEFORE AND AFTER A BILL ANALYSIS PROGRAM. TWO SEPARATE CASES ARE SHOWN.

Attitude of the Public	*Before Bill Analysis*	*After Bill Analysis*
Company A		
Favorable to the Company	38.9%	57.7%
Unfavorable to the Company	61.1	42.3
Company B		
Favorable to the Company	55.8%	75.0%
Unfavorable to the Company	44.2	25.0

with the proper explanation of antigovernment ownership arguments, it switches people from supporting government ownership to opposing it.

TABLE 4, page 305, shows the before-and-after results of bill analysis programs in two serious cases of threatened municipal ownership. In both of these cases the municipal ownership fight was further complicated by closeness to a large federal hydroelectric power system and the promise of available government power for municipal distribution. In one case the election was avoided and in the other case the company won the election.

Data are available on additional situations in which similar results were obtained. The figures vary but the general effect is always in the same direction. Personal calls on customers, with proper explanation of their bills, do more to improve unfavorable attitudes than anything else we know about. They do it faster, more positively, and with less inflammatory side effects than any other method available to us.

Cost is always a consideration in such an activity. The value of the property which is at stake is also always a consideration. Sometimes very great costs are well warranted. At other times the situation is such that an entire canvass of all customers is not necessary. The work can be selective and efforts concentrated where most needed.

THE important and significant fact is that in this process of customer bill analysis we have a tool and a method which *will* meet the dangers of increasing criticism of the cost of electric service, if it is used properly. It can be applied so as to hold the support of the all-important influence group in a town, if the work is begun in time. The best time to do the work is before trouble starts. Calls are much more effective when carried out in a normal atmosphere as contrasted with the emotional heat which develops in a government ownership fight.

Unless programs of bill analysis are carried out with the influence group, it is probable that over a period of time this group will be influenced by the promise of lower electric service costs by advocates of co-op and government ownership. If the influence group is lost to us, then we shall have much more difficulty in stemming the encroachments.

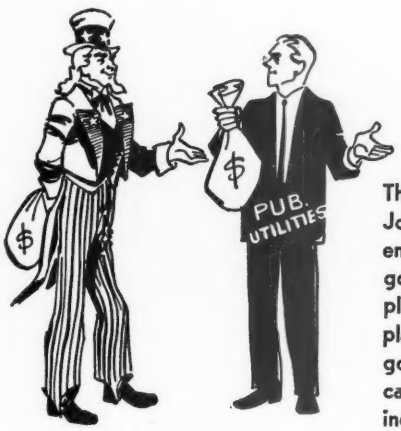
In a subsequent article I shall deal with the related problem of how to introduce electric rate increases when they become necessary. That subject was discussed at the aforementioned PIP Workshop panel in Minneapolis in October, and I shall present a report and analysis of the viewpoints and suggestions made there.

Part II of this article will appear in the next issue of the FORTNIGHTLY.

"SOCIALIZATION has been an expensive experiment for Britain but it has not been a total failure. It has demonstrated that socialist theory and socialist fact are far from being the same thing—a valuable lesson for Americans as well as Britons."

—EDITORIAL STATEMENT,
Los Angeles Times.

America Is at the Crossroads In Nuclear Power



By CHARLES D. MATTHEWS*

The expanded nuclear power program sponsored by the Joint Committee on Atomic Energy appears to favor emasculating the initiative of industry and adding more government controls. And, unless "second generation" plants are more explicitly defined, it would seem that the plan would force free enterprise to take a back seat to government enterprise. Nevertheless a workable program can still be developed if the Joint Committee, AEC, and industry will pool their thinking and efforts.

TODAY, America stands at a crossroads on the highway to civilian nuclear power—a crossroads created by political rather than technological developments. Decision on a road to take in the years ahead will affect the take-home pay of every taxpayer.

Dissatisfied with the rate of progress under the Atomic Energy Commission's current program, the Joint Senate-House Committee on Atomic Energy (JCAE) seized the initiative again in 1958 by proposing a new plan for accelerating peacetime nuclear power development. Unless AEC and JCAE reach an understanding early in the new Congress, the Joint Committee may introduce its own legislation directing the commission to follow a specified course of action—just as it did in directing development of the H-bomb and the first nuclear submarine, in spite of strong administration objections.

*Public relations consultant, Washington, D. C. For additional personal note, see "Pages with the Editors."

The road suggested by JCAE for peacetime expansion is only one of several alternative routes proposed during the last session of Congress. Another important alternative was pointed out by the Technical Appraisal Task Force of the Edison Electric Institute and was based on a comprehensive study of civilian nuclear power developments since the fall of 1956.

As a result of several informal meetings with the Joint Committee, even the Atomic Energy Commission got into the act last June by proposing some changes in its future activities. Senator Clinton P. Anderson, new JCAE chairman in the 86th Congress, said at the time, however, "All things considered the AEC long-range program statement presented a genuine attempt to be responsive to suggestions by the Joint Committee. But the Joint Committee quickly found that the program has significant limitations."

JCAE then took the initiative by direct-

ing its staff to prepare its own version of a road map which the nation should follow to speed up our nuclear development program. The staff report was printed as a Proposed Expanded Civilian Nuclear Power Program and is the basic document that has created this political crossroads. Since JCAE has the power to introduce legislation to put its plan in action, the plan should be examined carefully.

Objectives of JCAE Program

THERE are two main objectives which the majority of the Joint Committee feels the United States should strive for in a nuclear power program. First, demonstration of economically competitive nuclear electric power in this country by 1970 and in high fuel cost allied nations by 1968. Second, fortification of this nation's position of leadership in peaceful uses of nuclear energy, particularly with regard to power.

Most individuals would probably agree that these general objectives are worth striving to attain, even though some clarification and restatement may be desirable. For example, Elmer L. Lindseth, president of Cleveland Electric Illuminating Company and chairman of the EEI Atomic Energy Committee, suggests that the United States, as the free world's acknowledged leader and champion of free enterprise, should take care not to adopt methods in attempting to fortify one aspect of its leadership which would be contrary to this economic system. He also has stated that any expanded program should assure maximum industrial participation so normal business incentives and the nation's normal business system will replace government control, direction, and ownership as soon as practical.

MANY utility executives have expressed serious doubts to the Joint Committee about the advisability of assigning specific years for obtaining competitive nuclear power either here or abroad. Technological advancement in the complex nuclear art cannot be so assured as to fit neatly into an arbitrary timetable. For example, the chairman of the board of an important midwest utility forewarns that to assign a specific date legislatively as an objective for demonstrating competitive nuclear power is to invite a governmental "crash program" as the target date approaches if technology indicates competitive costs are still unobtainable. Such a "crash program" would probably be unwise, unproductive, and a waste of taxpayers' money.

It is not clear exactly what the Joint Committee means by "competitive" nuclear power. In the United States, conventional fuel costs differ greatly between regions; for example, in Boston local fuel costs are about five times higher than in Dallas. A nuclear plant, therefore, could be considered "competitive" in Boston long before being "competitive" in Dallas, if only comparative fuel cost is taken into account. Also, it is not clear whether a nuclear plant must be "competitive" initially or may be expected to attain that goal during its lifetime.

Committee's Route to Objectives

THE expanded program, as envisioned by JCAE, for the next five to seven years would cover a total of 21 reactors of 15 diversified types and sizes costing about $875 million. Electric output of these 21 reactors would total about two million kilowatts, but the committee anticipates that only about half of the proj-

ects will probably prove technically or economically desirable for construction.

The proposed committee route for carrying out this program consists basically of two broad avenues. The first avenue is by private construction and ownership of plants with certain research and development assistance from AEC. The second consists of AEC construction and ownership of certain experimental prototype reactors and larger projects not otherwise constructed.

Large traffic signs are proposed to regulate the flow of private companies desiring to travel down the first avenue. AEC would serve as a tollgate, allowing those industry projects to pass which have been previously identified as being based on reasonably well-demonstrated technology and not needing extensive additional research and development work. Almost as an afterthought, the Joint Committee added another section to the program allowing AEC, *in exceptional cases,* to request specific authorization for proceeding with industry projects not previously identified by the commission.

THESE requirements suggested by JCAE may sound reasonable enough. But as Hamlet said, "Ay, there's the rub." They could result in basic technical decisions being made by a limited government group on a noncompetitive basis with little or no consideration given to the effect on the taxpayer. Does not the economic history of the United States indicate that better results would be obtained by decentralization of decision making and by giving industrial initiative and competition greater opportunity?

Furthermore, charging AEC with almost sole responsibility for designating type, size, and design of projects to be supported appears contrary to the spirit of the Atomic Energy Act of 1954 which was supposed to give industry greater—rather than less—participation in development of nuclear energy. Any program should not only *allow,* but should vigorously encourage, projects proposed by industry. This should be the rule rather than the "exception."

THE second avenue suggested is by government ownership of reactor plants constructed at AEC sites—with all power being consumed on the site—or as a part of municipal, state, federal, or co-op-owned systems, or at locations where

¶ "The Joint Committee's program costs are based on a very important assumption. Plants totaling one million kilowatt capacity would be constructed at an **assumed** average cost of $500 per kilowatt or $500 million with associated design and development adding something like $375 million. This totals $875 million over a five- to seven-year period if the basic assumption is realistic. . . . The Joint Committee's assumption that construction will cost about $500 per kilowatt might be questioned in light of its action in the 85th Congress of authorizing approximately $1,250 per kilowatt for construction of an improved version of Britain's Calder Hall plant. It can be pointed out also that construction of the Shippingport reactor cost nearer $1,250 per kilowatt plus research and development; the Santa Susana plant in California cost about $970 per kilowatt plus research and development; and the small Argonne plant near Chicago about $929 per kilowatt."

power may be distributed to private companies. In this latter case, distribution must be made in accordance with the "preference clause" of the Atomic Energy Act which, by definition, is designed to favor publicly owned power utilities. Mention of the "preference clause" in the third site alternative makes it almost meaningless, because there are very few locations in the United States where power could be distributed to private companies in accordance with this clause.

These government-owned reactors would be operated under contract with AEC long enough to evaluate their research and development contribution, but in no case for longer than ten years. Then, the commission would sell the reactor plant to the operating utility or, if the utility declines to purchase, the reactor would be dismantled. All reactors at AEC sites would be dismantled since there would be no utility to buy them.

These provisions for government-owned plants also sound innocent enough, and they may be now. But, thoughtful persons have cause for a sober second look when they take only a brief glance at the history of how government ownership when once established tends to grow and perpetuate itself, destroying the vitality of industry initiative.

What Is JCAE's Meaning of "Second Generation" Plants?

THE Joint Committee's exact meaning of "second generation plants" should be of serious concern to every taxpayer, because upon the definition of that phrase in the following quotation may depend the extent of financial support coming from private industry:

> The design and construction phase would be carried out through an expanded and modified power reactor demonstration program of privately owned *"second generation"* plants. . . .

It is a truism to say that the more money coming from industry, the less will have to come from Uncle Sam or actually out of the taxpayer's pocket.

According to many utility executives, most of the 21 projects listed by the Joint Committee are "first generation" reactors. Therefore, by limiting private industry to "second generation" plants, the committee is precluding industry from participating in most of these projects. On the other hand, some industry officials seem to think many of the projects might be considered as "second generation." Differences of opinions such as these from knowledgeable groups and individuals emphasize the lack of clear-cut understanding of exactly what criteria should be used in determining whether a given reactor project can be considered "first" or "second generation" nuclear power plants.

How Much Will the Program Cost?

THE Joint Committee's program costs are based on a very important assumption. Plants totaling one million kilowatt capacity would be constructed at an *assumed* average cost of $500 per kilowatt or $500 million with associated design and development adding something like $375 million. This totals $875 million over a five- to seven-year period if the basic assumption is realistic. Since it is not clear just how much of this amount will have to be paid by the government, taxpayers should ask, "Is it realistic?"

The Joint Committee's assumption that construction will cost about $500 per

Spirit of Atomic Energy Act Is Negated!



"THESE requirements suggested by JCAE may sound reasonable enough. . . . They could result in basic technical decisions being made by a limited government group on a noncompetitive basis with little or no consideration given to the effect on the taxpayer. Does not the economic history of the United States indicate that better results would be obtained by decentralization of decision making and by giving industrial initiative and competition greater opportunity? Futhermore, charging AEC with almost sole responsibility for designating type, size, and design of projects to be supported appears contrary to the spirit of the Atomic Energy Act of 1954 which was supposed to give industry greater—rather than less—participation in development of nuclear energy."

kilowatt might be questioned in light of its action in the 85th Congress of authorizing approximately $1,250 per kilowatt for construction of an improved version of Britain's Calder Hall plant. It can be pointed out also that construction of the Shippingport reactor cost nearer $1,250 per kilowatt plus research and development; the Santa Susana plant in California cost about $970 per kilowatt plus research and development; and the small Argonne plant near Chicago about $929 per kilowatt. Even with improved technology, perhaps a more realistic assumption would have been between $750 and $1,000 per kilowatt for the widely diverse program suggested by the Joint Committee. If this proves to be true, estimated cost would be increased from $875 million to between $1,125 million and $1,375 million.

THIS suggested program does not even include the cost of projects presently under construction or already implemented, nor reactors to be constructed by private industry unless specified in the committee's list of projects.

Atomic Energy Commission's Position On Program

THE position which will be taken by AEC on any planned program of civilian nuclear power acceleration is largely unknown at the present time. New commission chairman, John A. McCone, has approached the question anew rather than accepting completely the old proposals he inherited from his predecessor Lewis Strauss. To assist the commission in its restudy of an expanded program, McCone has appointed an outside group of distinguished men to serve as an Ad Hoc Advisory Committee. The Ad Hoc Committee presented its report to the commission on January 5th.

General Electric Company's "Operation Sunrise"

ANOTHER program for achieving competitive nuclear power was made public late in 1958 by the General Electric Company. Just what effect, if any, this proposal will have on the Joint Committee's deliberations in preparing a legislative program is uncertain, but it should

be mentioned here briefly to indicate one major company's plans for nuclear development.

General Electric's "Operation Sunrise" attempts to define another method of achieving competitive nuclear power in seven years through a succession of refined and improved versions of the same general reactor type being built for Commonwealth Edison and Pacific Gas and Electric. GE claims the program starts from a base of solid experience and proceeds in a straight line toward a reasonable and attainable goal by construction of a group of small and medium "developmental" atomic power plants, to be in operation by 1962, through "evolutionary" plants, to be in operation by 1965, to "target" plants, to be in operation by 1970. "Evolutionary" plants are expected to be competitive in the locations where constructed and "target" plants to be competitive with 25 per cent of the conventional plants then being built in the United States.

Estimated cost of "Operation Sunrise" would be about $128 million, which includes about $90 million for construction of four new "developmental" plants and $38 million for research, development, and test activities.

Conclusion

IN its summary of the Proposed Expanded Civilian Nuclear Power Program, the JCAE said:

> . . . The ultimate goal of the entire program is to develop strictly commercial plants which would be economically competitive with no financial assistance from the government.

Everyone might well say "Bravo" to this statement, for this is an attractive goal.

Then, the question must be asked, however, "Does the remainder of Joint Committee's program statement implement this goal or abrogate it?"

If this statement, coupled with the objective of achieving competitive nuclear power in the United States by 1970, represents the Joint Committee's genuine desire, one may seriously question the ability of the *expanded program* to reach this goal and objective satisfactorily.

Ralph Cordiner, chairman of General Electric Company, expressed the opinion that "achievement of competitive nuclear power must follow the normal course of evolutionary improvement with a reactor type which is on solid ground now and which offers important potential for future improvement." To GE, "Operation Sunrise" meets these conditions.

THERE are a few other concepts for which a substantial body of research, development, and operational information exists. By concentrating the nation's efforts on these reactor types, there would seem to be a better chance for achieving competitive nuclear power. This does not mean scientific and engineering investigations on other reactor types should be sidetracked or forgotten; but, rather, they should not be given priority treatment and identified as projects the AEC must pursue.

The result of the Joint Committee's present approach would seem to be a dissipation of research effort on a wide variety of almost unrelated "first" and "second" generation projects.

The Joint Committee must give serious thought to reconstituting its list of reactor

projects for new undertakings with a view to reducing the number of different concepts and increasing evolutionary development of the most promising through several successive generations of plants.

If, on the other hand, the real objective of the committee is to develop the broadest possible base of diverse reactor knowledge and experience, the *expanded program* may accomplish this by offering "a little something for everybody." Even in this latter case, however, the basic declaration of policy contained in § 1 of the Atomic Energy Act of 1954 will require some rewriting and clarification of many provisions of the program. This policy states in part: " . . . development, use, and control of atomic energy shall be directed so as to . . . strengthen free competition in private enterprise."

THE proposed expanded program as stated in the Joint Committee's printed report would seem to violate three of the basic tenets of the traditional economic philosophy which has made America the most productive nation in history:

1. Limited government. The program is designed to place additional governmental controls back over development of civilian nuclear power.

2. Individual initiative. Reactor projects initiated by industry will not qualify for the power reactor demonstration program except in special cases.

3. Free enterprise. Unless the meaning of "second generation" plants is clarified satisfactorily, free enterprise will be forced to give way to increased government enterprise in this vital new field.

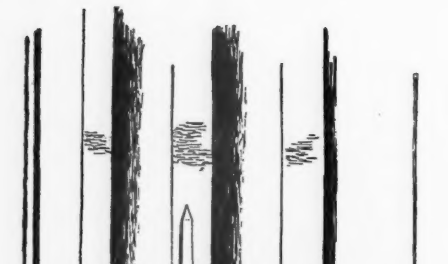
IN spite of the program's shortcomings, compliments are due the Joint Committee staff for conscientiously and thoroughly identifying technical and policy questions which still need answering in the nation's drive toward competitive nuclear power. The staff report could prove helpful as a point of departure from which a truly workable program of civilian nuclear power development may be devised as a result of a concerted effort by the Joint Committee, Atomic Energy Commission, and industry.

Yes, America stands at a crossroads in nuclear power development, and all taxpayers have a stake in the decision as to which is the best road to take.

"AS the church retains its strength through constant internal and external education and religious living by devoted men and women, so Capitalism must be interpreted and lived by those who are conscientious believers.

"The great moral foundation of Capitalism is that it must assume responsibilities to society commensurate with its strength and privileges. It must be administered by its stewards both for benefit to themselves and to society. That is the function of American service Capitalism. We must have responsible Capitalism within a responsible society."

—RAYMOND W. MILLER,
Lecturer, Harvard Graduate School of Business Administration.



Washington and the Utilities

Atom Legislation

SENATOR Albert Gore (Democrat, Tennessee) on January 28th introduced his long-awaited legislation authorizing acceleration of U. S. peaceful atomic power efforts, including the construction of one million kilowatts of nuclear power-generating capacity within the United States by 1966.

The bill proposed by the Senator also covers acceleration of the thermonuclear research and nuclear rocket propulsion development. The bill asks a total of $1 billion for all three acceleration efforts, but no breakdown for the individual efforts was available. Instead, the Senator's office explained that the amounts for each would be worked out by the Joint Committee on Atomic Energy, of which the Senator is a member.

The bill would provide for construction of both large and small power reactors under Atomic Energy Commission contracts in order to advance nuclear power technology and also demonstrate the economics of nuclear power. The bill would also provide a "vigorous" program of international co-operation in the field of peaceful atomic power in order to effectively carry out U. S. "Atoms-for-Peace" ideals.

In a related development, a subcommittee of the Joint Committee on Atomic Energy began three days of hearings on the problems of radioactive waste disposal. The subcommittee, headed by Representative Chet Holifield (Democrat, California), heard Dr. Abel Wolman of Johns Hopkins University declare that radioactive wastes, in terms of radioactivity content, are "by far a greater total hazard" than fall-out from nuclear weapons testing.

ELSEWHERE on Capitol Hill better relations seem to be shaping up between Senator Anderson (Democrat, New Mexico), chairman of the Joint Committee, and the AEC. On the surface at least, the attitude is already 100 per cent more cordial than existed prior to the replacement of Admiral Strauss (now Secretary of Commerce) by the new chairman of the AEC, John McCone. This is not to suggest that Chairman McCone has altered the policies of the AEC very much. He has not. Somehow they seem to be working out a rapprochement between Chairman

McCone and the previous vocal critics of the AEC on the Joint Committee, notably Senator Anderson.

The Senator no longer seems to desire immediate federal construction of large-scale nuclear plants, and this philosophy coincides with that of the AEC. Still to be resolved, however, is whether private industry or government will build first generation prototypes of the gas-cooled, organic moderated, and heavy water reactors, the only new concepts needing prototype development. Nuclear reactors embodying boiling water, pressurized water, metal-cooled, and fast-breeder types of heat are presently being built in prototype size by private industry.

THE fight over public *versus* private development of atomic energy power plants has "held back the program," Anderson told a press conference shortly after he was named chairman. In addition, he said, the United States should get a nuclear-propelled plane in the air by the summer or early fall of 1962. "This can and ought to be done," Anderson declared.

He said he would ask Congress to appropriate funds beyond those requested by President Eisenhower to speed construction of the plane. At the present rate of administration spending, the plane will be delayed "until well into the 1970's," Anderson said. He proposed that spending be increased by $280 million over the next four years and said President Eisenhower's request for $150 million should be increased by $45 million in the fiscal year beginning July 1st.

Senator Anderson has called for an accelerated program of co-operation between the government and private companies in atomic power development. He said he would like to see $875 million spent over the next five to seven years to construct prototype plants that would furnish up to 100,000 kilowatts. He pinpointed 1969 as the target date when the United States should be able to achieve economically competitive nuclear power. The Senator stated that all first generation prototype nuclear plants should be built by the government and in remote AEC installations, so as to avoid dispute over public *versus* private power. All electricity generated by such plants, he said, should be used for government purposes and none sold for private use.

Niagara Power Setback

THE Federal Power Commission told the state of New York, in effect, to give some land "back to the Indians." Strictly speaking, the Indians still have the land and do not want to let go of it for the purpose of erecting a reservoir for the Niagara power project. The land in question is part of a tract of nearly 6,500 acres which the Indians bought in 1924 for a reservation after they were resettled under a treaty agreement under which they moved from North Carolina.

The New York State Power Authority only wanted 1,383 acres and two of the five members of the FPC, dissenting Commissioners William R. Connole and Frederick Stueck, were inclined to agree that the State Power Authority had a better right as a matter of public interest. The authority is engaged in construction of a $700 million Niagara Falls power project but the FPC majority opinion, if upheld on appeal, is likely to be a substantial setback, or at least make the project more expensive.

The FPC majority said it realized a "substantial" construction delay, "severe" community disruption, and higher-cost electricity will result if the power authority is forced to use the other neighboring lands for its reservoir. If other lands are used,

the opinion said, parts of Lewiston, New York, will be separated by a large body of water that cannot be bridged; a main highway and railroad tracks will be rerouted; school transportation, sewage, water supply, fire protection, and civil activities will be disrupted; 450 homes and two cemeteries will be uprooted, and a new million-dollar school will be destroyed.

NEVERTHELESS, the FPC ruled flooding the Tuscarora lands would run contrary to the purpose for which the Indian reservation was created by Congress. "We regret that we have not been able to reach any other solution," the opinion declared, "but we cannot permit our judgment to be swayed by our personal views of what is desirable, but must administer the laws as passed by Congress and as interpreted by the courts."

The case was sent back to the commission by the federal appeals court for the District of Columbia last November upon an appeal by the Tuscarora nation. The court ordered the FPC to see if the license it granted the New York State Power Authority in January, 1958, met the Federal Power Act requirement that construction on Indian lands not interfere with the purpose for which the reservation was created.

In their dissent, Commissioners Connole and Stueck said they could not agree that construction of a $700 million project should be jeopardized because of the flooding of part of an Indian reservation. Conditions could be attached to the license assuring the Tuscaroras of a continuation of their way of life, the dissenters said. In fact, they declared, the power project could bring the Indians an "unprecedented opportunity" to advance with improved farming facilities, homes, schools, health facilities, and better lands, drained, improved, and laced with roads.

Water Controls Stressed

THE new Congress is showing increased interest in the importance of water resource development. On the House side, the Public Works Committee has created for the first time a permanent subcommittee on watershed development. Representative Smith (Democrat, Mississippi) will head the new subcommittee, which has announced that its business this year will include an investigation of alleged rivalries between the Army Corps of Engineers and the Soil Conservation Service. Smith said the new subcommittee was established "because there has not been enough overall emphasis on the watershed program." He said the subcommittee will examine individual projects, as well as evaluate the whole program.

In the Senate, a resolution has been introduced to establish a special committee to deal with water resource development problems. Montana's Democratic Senators Mansfield and Murray are sponsoring the proposal, which provides for a committee of eight Senators familiar with water problems. Mansfield said Congress needs to "unify" its approach to water legislation which, in the past, has involved solutions that have been too "piecemeal." The result, said Mansfield, is that "we are failing dismally in our responsibility for the nation's water resources."

In a related move, Senator Magnuson (Democrat, Washington) has issued a call for all Pacific Northwest Senators to sit down with the Chief of the Army Engineers and map out a river development program that everyone can support. Magnuson professed to be "fed up" with all the conflicting proposals and arguments over the development of this region. He suggested that the informal group find out what private industry, publicly owned utilities, and the federal government plan to do, proceed on proposals over which

there is no disagreement, and put aside temporarily any projects involving conflicts which cannot be resolved.

New York Gas Fuel Blocked

THE Federal Power Commission on January 30th denied a proposal by Transcontinental Gas Pipe Line Corporation, of Houston, Texas, to provide a transportation service for Consolidated Edison Company of New York, Inc., to be used for boiler fuel in a steam-electric plant in Manhattan. The FPC at the same time denied a request that Transco be directed to sell gas to Lynchburg (Virginia) Gas Company's wholly owned subsidiary, Lynchburg Pipe Line Company, which in turn would resell the gas.

The two matters were deferred for decision by the FPC last September 4th when it issued an opinion authorizing Transco to carry out a major expansion of its natural gas transmission system, including the development of storage fields in northern Pennsylvania. The proposed transportation (X-20) service for Consolidated Edison involved the construction and operation of pipeline facilities costing an estimated $20 million to increase Transco's system capacity by 50 million cubic feet of natural gas per day.

The commission said that militating in favor of the X-20 service was the fact that most of the conventional requirements of public convenience and necessity were satisfied. However, it said, there are a number of important factors opposing the grant which "tip the balance" against granting the request. Among other things, the FPC pointed out that authorization of this and similar proposals would preempt for this usage capacity which otherwise would be available to meet more urgent and widely beneficial public needs.

THE commission said that while the idea of relieving the United Nations headquarters of an unpleasant and annoying smoke nuisance from the boilers in which this gas was proposed to be burned "is an appealing one," it pointed out that the gas would be used in only one of the two Waterside plants, and in only two of eight boilers at that one. It also said that additional volumes of gas contemplated to be transported in the future would not be burned at the Waterside station at all, but at some other facilities.

The FPC said that gas-distributing companies may find it to the advantage of their customers to seek new sources of gas in the field rather than to rely on pipeline suppliers but there are risks of grave disadvantage as well. It said the impact of large demand on relatively limited supply is certain enough to raise rates and field prices if only one bidder is bringing that demand to bear on the supply, and the FPC indicated that the impact would be much more serious when it is in the form of multiple bidders, each attempting to reserve to itself a firm supply.

The FPC disagreed with Presiding Examiner William J. Costello, who in his initial decision held that the end use of gas was not a factor to be considered in applying the standard of public convenience and necessity to a proposed transportation, so long as the end use had no relationship to or effect on any jurisdictional service. Citing previous commission and court decisions where end use was considered with respect to the sale of gas, the FPC said it saw no justification for concluding that end use should not be considered in the case of transportation of gas also.



Telephone and Telegraph

NTCA Meeting in Washington

IMMEDIATELY preceding the recent national convention of the National Rural Electric Co-operative Association in Washington, D. C., the allied National Telephone Co-operative Association held a two-day meeting in the same city. The opening session was featured by addresses from Clyde T. Ellis, general manager of the National Rural Electric Co-operative Association, and Riggs Shepperd, the outgoing president of the NTCA.

Ellis emphasized the handicap under which both rural telephone and electric co-operatives operate in their contacts with the large Bell and independent commercial telephone companies. He pointed to other inherent restrictions and difficulties in co-operative telephone enterprises. They are not allowed to serve in villages or towns of over 1,500 population. They are not allowed to serve subscribers to whom service is already available from an existing telephone company. Co-operatives which have borrowed money from the REA have the financial obligation of repaying their loans as compared with commercial companies which finance a debt obligation over indefinite periods.

Ellis also referred to the fact that co-ops might be exposed to the bias of regulatory commissions in some areas. And because rural telephone co-operatives operate outside plants, composed mainly of service pole lines, the speaker noted that they experienced considerable hazard from the weather. Mr. Ellis suggested that the NTCA should seek a different setup for REA loans to co-operatives, as compared with commercial telephone company borrowers. He thought that Congress might even set up separate funds. He pointed out that REA makes more telephone loans to commercial companies than to co-operatives. Specifically, he referred to the proportion last year of 75 per cent of REA telephone loans to commercial companies and only 25 per cent to co-operatives. The REA position on this is that it is required under the law to give preference to existing facilities and that it must make loans on an economic basis rather than on a basis of the organization pattern of the borrower.

ELLIS thought that the REA Act does not require that loans be made solely for serving farmers, but rather for serving people in rural areas who do not have adequate telephone service or any service at all.

The outgoing president of the National Telephone Co-operative Association, Riggs Shepperd, asked the membership

to oppose vigorously any attempt by the Eisenhower administration to have Congress increase the present 2 per cent interest rate on REA loans. He also favored "information programs" at the grass-roots level by co-operative telephone operators. With reference to proposed legislation, support was asked for bills in Congress to make REA independent of the policy controls now exercised by the Secretary of Agriculture over REA loans.

Pay TV Legislation

THE National Broadcasting Company has announced it has no objections to the type of pay TV tests recently proposed by Representative Oren Harris (Democrat, Arkansas). Harris, chairman of the House Interstate and Foreign Commerce Committee, proposed last month that the FCC permit some technical tests of pay TV. The trials would be authorized for limited periods of time. A particular system of pay TV would be tested by only one person at any time in a given area.

Robert Sarnoff, chairman of the board of NBC, repeated the NBC stand against pay TV.

"We remain firmly convinced that a pay system of national character would grow only by cannibalizing the present free system," said Sarnoff in one of his periodic letters to TV editors. "And we continue to feel that broad-scale tests would so entrench subscription operations that the result would be tantamount to establishment of pay television on a national basis.

"But we do not believe that tests of the type proposed in Chairman Harris' resolution would raise that threat, and we do not object to such tests. They may serve to satisfy the view held by many people of honesty and integrity that some form of test opportunity should be given the promoters of pay systems—and there may be some value in satisfying such a view, provided that the price does not involve jeopardizing the whole television system of this country."

THE Harris Bill for a limited trial of pay TV apparently does not go far enough to satisfy Chairman John C. Doerfer of the Federal Communications Commission. In any event, he recently expressed the hope that a realistic trial of pay TV can be provided for before the end of 1959. Doerfer addressed an audience of some four hundred members of the Radio and Television Executives Society, meeting in New York city on February 4th.

The Harris Bill, Chairman Doerfer noted, would allow the FCC to authorize a technical test of the pay TV system. But it would at the same time prohibit pay TV without specific congressional approval. Under the present status of the law, it is widely believed that the FCC could authorize pay TV. This explains the various requests from Congress that a status quo on pay TV should be maintained until Congress has had an opportunity to study the matter.

Doerfer said the FCC has invited pay TV operators to submit plans under the limited conditions which would protect the present system of free telecasting. He said he was of the opinion that "somewhere between Mr. Harris' objective and that proposed by the commission, a trial of subscription (pay) TV system or systems can be provided for upon a realistic and meaningful basis—without endangering our free television system."

The FCC will, however, retain the status quo, according to Doerfer, until after the first session of the 86th Congress

is concluded. In other words, if Congress fails to act, or at least to do something definite in the way of expressing its intent about pay TV before it adjourns, the FCC would feel free to go ahead with its own arrangements for giving subscription television a trial.

Hagerty Denies FCC Pressure

WHITE HOUSE Press Secretary James C. Hagerty on February 7th opened his correspondence files to deny a charge that he had tried to intervene for political reasons in a government agency decision on a television channel. He said the author of the charge was "either misinformed or lying." His statement was in rebuttal to Bernard Schwartz, New York University professor who was let go last year as counsel for the House subcommittee which investigated efforts to use influence on government regulatory agencies. Hagerty's action was prompted by a reference in Schwartz's newly published book, *"The Professor and the Commissions,"* in which Schwartz told of his experience with the House subcommittee. He said he had left material in the files for about 17 cases which the subcommittee "failed to develop further."

One of these was described as an "Albany-Schenectady" TV channel case. Schwartz listed it with the parenthetical comment that "the President's press secretary intervened against an applicant on political grounds." The exchanges revealed that William J. Embler, a Republican legislative aide at Albany, New York, had written Hagerty on March 1, 1957. He said Democrats were making "political propaganda" of an FCC decision to convert the WRGB television station from a VHF to a UHF channel.

Embler said he was "not a stockholder in anything" but was "concerned with the success of the Republican party." The decision, he said, would leave some homes without television or put them to the expense of converting sets. He also wrote that the Democrats were arguing that former Governor Thomas E. Dewey, for whom Hagerty once worked, had a hand in the decision. Hagerty wrote Embler on March 5, 1957, that he had not heard of the case "but you do have a good point," and that he had asked for an answer from "interested people here."

IN a lengthy reply on March 13, 1957, the then FCC chairman, George C. McConnaughey, explained the FCC policy aimed at providing VHF television in some areas and UHF in others. He said the commission decided to limit the Albany-Schenectady-Troy area, which already had two UHF stations, to UHF.

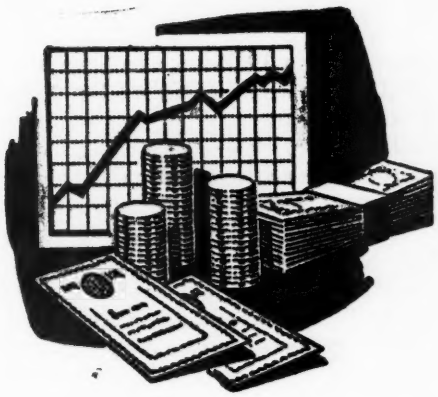
Hagerty said he did not see how he could have used political influence since the decision was made before he heard from Embler and was not changed. When he learned that the decision already had been made, he said, he did not even reply further to Embler.

Schwartz subsequently noted that the original FCC decision was protested by all interested parties. Further hearings were later held on the issues and the FCC reversed its decision. Schwartz added that he did not charge that the decision in this case was based on anything but the record, but that there was an intervention by the White House aide which he did not think was proper.

Schwartz was fired last year as subcommittee counsel after a series of clashes with Representative Harris, chairman of the parent Commerce Committee.

Financial News and Comment

By OWEN ELY



1959 "Highly Promising" for Electrics

STANDARD & POOR'S reports that while industrial profits declined about 20 per cent in 1958, net income of electric utilities increased over 7 per cent. Contributing factors were a 4.5 per cent increase in revenues and a 1.2 per cent reduction in fuel costs, reflecting an increase in hydro generation. The service forecasts a gain of 8 per cent in revenues for 1959, assuming better industrial sales. A good gain in commercial sales is also expected, aided by an 8 per cent increase in commercial building construction and anticipated resumption of deferred modernization plans. The upward trend in residential sales will continue in line with rising consumer incomes, a high rate of residential building, and larger appliance sales. Average residential usage of 3,600 kilowatt-hours is anticipated this year, a gain of about 6 per cent over last year.

Favorable factors with respect to profit margins are the continued installation of more efficient generating capacity, and additional rate increases. After allowance for heavier fixed charges, net income this year is expected to gain perhaps 10 per cent over last year, indicating continued dividend increases, the service predicts.

STANDARD & POOR'S estimate seems a little on the optimistic side considering the probability that the important "credit for interest on construction" will be lower this year and afford less of an offset against increasing interest charges. The weather also remains an unpredictable factor with respect to revenues from air conditioning, heating, and irrigation pumping, and in connection with fuel expenses (hydro supply) and storm damage.

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Ten Per Cent Gain in Electric Appliance Sales Forecast

ACCORDING to "flash reports" from utility companies compiled by *Electrical Merchandising* covering 17 per cent of the U. S. buying public, retail sales of leading appliances showed gains in 1958

compared with 1957—to which we have added the industry forecasts for 1959. (See table below.)

Electrical Merchandising expects consumers' income after taxes to show a gain of nearly 9 per cent this year over 1958; population should gain about 1.4 per cent and housing starts increase moderately. Consumer spending for durables is forecast at $40 billion—12.2 per cent of income after taxes *versus* 11.7 per cent in 1958 and a high of 14.4 per cent in 1955. About one-fifth of this or $8 billion should be spent for appliances, an increase of 10 per cent over last year.

While the gross national debt continues to mount, consumer credit is considered to be adequate for increased spending. Consumers paid off one billion dollars of instalment debts last year and saved nearly 7 per cent of disposable income. Thus despite the somewhat discouraging trend of unemployment figures (due in part to more efficient use of workers) the magazine's forecast seems reasonable.

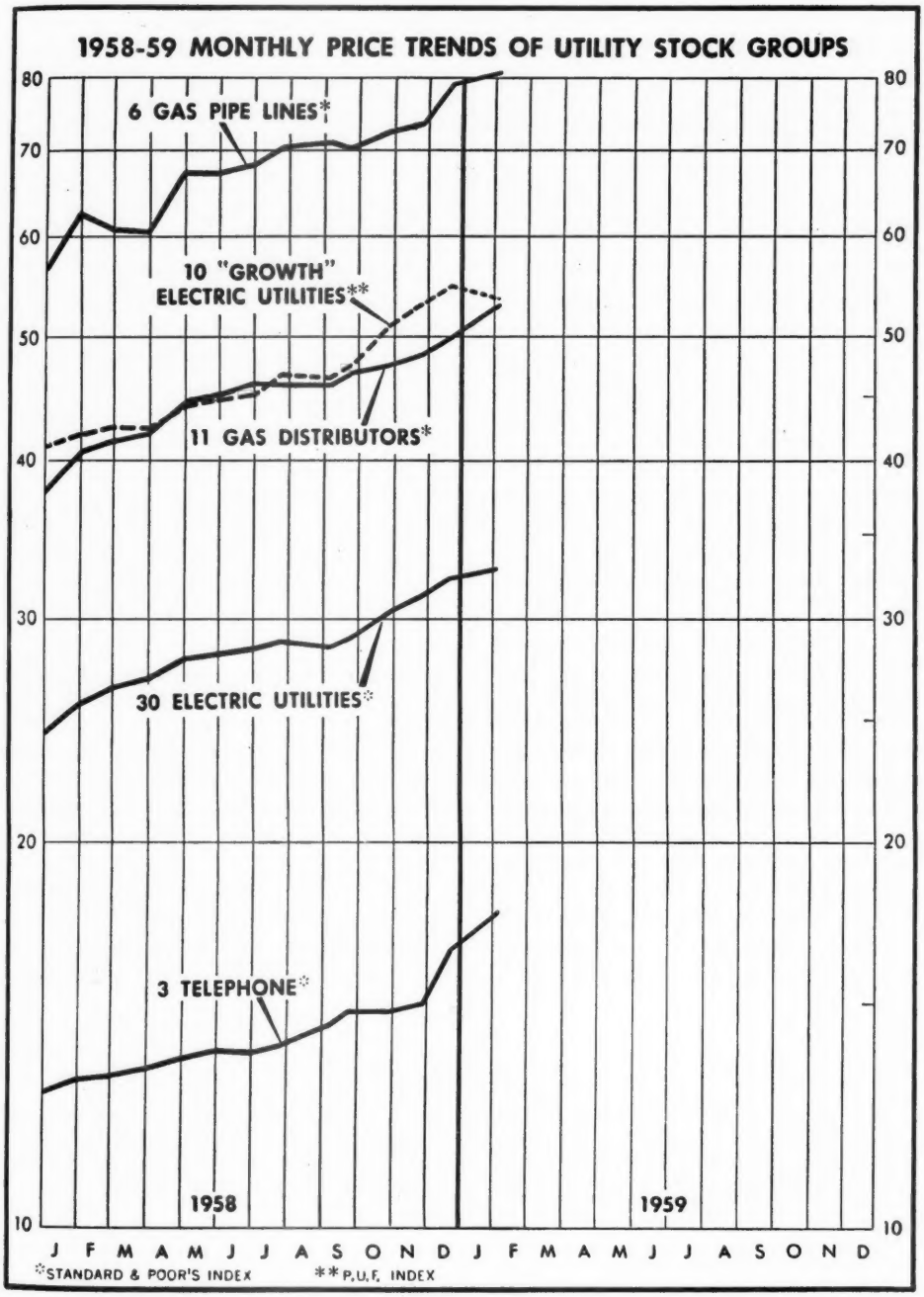
THE forecast of the National Electric Manufacturers Association is somewhat less optimistic, reflecting last year's inventory problems. Manufacturers' shipments of electrical appliances were off about 5 per cent last year, but are expected to gain at least 4 per cent this year. Following drastic production cutbacks a year ago to reduce factory inventories, production was stepped up in the second half to rebuild depleted stocks, and inventories are now said to be in healthier condition.

FOR the twelve months ended October, 1958, residential kilowatt-hour sales by investor-owned utilities showed a gain of 8.8 per cent over the 1957 period, despite the slowdown in appliance sales in the first half of the year. This compared with gains of 9.4 per cent for the calendar year 1957, 11.8 per cent in 1956, 10.1 per cent in 1955, 11.7 per cent in 1954, 11.3 per cent in 1953, and 12.5 per cent in 1952. It seems unlikely that the large rates of gain in the early 1950's will be attained again, but a gain of between 10 and 11 per cent in 1959 would seem indicated by present forecasts regarding housing and appliance sales.

Factory shipments of gas appliances apparently made a better showing than electric last year, with gains in all divisions except floor furnaces, free-standing ranges, and conversion burners, according to the Gas Appliance Manufacturers Association. Apparently both manufacturers' and dealers' inventories are being built up again. Central gas-heating units gained 51 per cent in December although for the year as a whole the increase was 15 per cent. Gas water heater shipments in December were up 21 per cent and for the year 6 per cent. Similar data were reported for ranges; for the year built-ins

	Month of October	*1958 to Oct. 31st*	*Forecast for 1959 v. 1958*
Refrigerators	+ 17	— 7	+ 7
Freezers	+ 27	+15	0
Electric Ranges	+ 8	— 5	+ 3
Electric Water Heaters	+ 27	+ 6	+ 2
Washers	+ 7	— 7	— 4
Dryers	— 11	— 6	+ 6
Dishwashers	+ 33	—	+11
Room Air Conditioners	+154*	— 8	+ 1
TV	— 2	— 8	x

*Comparatively small number of units.
x—Not available.


1958-59 MONTHLY PRICE TRENDS OF UTILITY STOCK GROUPS
6 GAS PIPE LINES*
10 "GROWTH" ELECTRIC UTILITIES**
11 GAS DISTRIBUTORS*
30 ELECTRIC UTILITIES*
3 TELEPHONE*
80
70
60
50
40
30
20
10
1958
1959
J F M A M J J A S O N D J F M A M J J A S O N D
*STANDARD & POOR'S INDEX
**P.U.F. INDEX

	1958	1962	Per Cent Change	Est. Saturation
Gas Ranges	1,838,000	2,295,000	+ 25	88%
Water Heaters	2,622,000	3,295,000	+ 26	62
Central Heating	1,090,000	1,015,000	— 7	27
Furnaces, F & W	474,000	630,000	+ 33	17
Heating Equipment	1,345,000	2,365,000	+ 76	—
Incinerators	48,000	100,000	+108	1

were up 18 per cent, but this did not fully offset a 6 per cent decline in "free-standing" ranges.

Makers of gas appliances have attempted a long-range forecast for their segment of the appliance market. This was also reported in the statistical (January, 1959) issue of *Electrical Merchandising* as shown in the above table.

1959 Generating Capacity to Exceed 1958

THE Year-end Summary on Electric Power, published recently by the EEI Survey Committee, gives final figures for 1958. Changes in the eight power supply regions were as indicated in table below.

In 1957 Regions IV, V, VI, and VIII had their maximum loads during the summer, but this may have been due in part to depressed peak loads in December resulting from the business recession at that time. In 1958, with a relatively cool summer, only Regions V and VIII reported maximum loads in summer.

Scheduled additions to generating capacity for 1960 are slightly less than forecast a year ago, mainly because of postponements of completion dates brought about by a lag in anticipated rates of load increase. However, many of these projects can be advanced again, should load conditions warrant. Based on scheduled dates of commercial operation, as of January 1, 1959, additions to generating capacity are now forecast as follows in millions of kilowatts:

Year	Thermal	Hydro	Total
1958	11.7	2.4	14.1
1959	12.8	1.6	14.4
1960	9.0	1.7	10.7
1961	7.2	2.4	9.6
1962 and later	2.6	1.6	4.2

Future Possibilities in Frozen Gas?

THERE have been rumors for some time that new methods were being developed to freeze natural gas, reducing its volume to 1/600th of normal for shipment to market, where it would be revaporized and piped to the consumer. We already have had a great deal of experience in shipping and using "bottled gas," a mixture of propane and butane con-

1958 Changes in Power Situation

	Per Cent Increase 1958 over 1957 Peak Load		Capability		Margin of Capability Over Peak Load	
	Dec.	Summer	Dec.	Summer	Dec.	Summer
I Northeast	8%	1%	10%	5%	19%	21%
II East Central	7	1	11	8	26	30
III Southeast	5	4	9	10	18	26
IV North Central	7	2	6	6	19	19
V South Central	5	7	15	13	70	24
VI West Central	10	3	9	13	34	48
VII Northwest	1	D4	12	8	29	40
VIII Southwest	8	4	9	6	31	25
U. S. Totals	6%	2%	10%	8%	27%	26%

tained in heavy metal cylinders under pressure. Under the new method no extra pressure is required, but to keep the gas in liquid form a temperature of 258 degrees below zero must be maintained.

The new gas was produced in some quantity during World War II by East Ohio Gas Company, but it was not realized that steel tanks would become brittle and crack in the severe cold. The tanks soon began to leak and gas was released, causing a disastrous fire. However, this did not discourage research in an unusual quarter, the United Stock Yard & Transit Company of Chicago, a privately owned enterprise of long standing. The company began experimenting with frozen gas on a small scale in the early 1950's to supplement its own power supply. Later it joined with Continental Oil Company at Houston to form Constock International Methane, Ltd., to develop a special ship to carry

JANUARY UTILITY FINANCING

PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	Amount (Mill.)	Description	Price To Public	Underwriting Spread	Offering Yield	Aver. Yield For Securities Of Similar Quality	Moody Rating	Success Of Offering
		Bonds						
1/ 6	$15	Washington Water Power 1st 4¾s 1989	100.00	.84N	4.75%	4.52%	A	a
1/ 9	15	San Diego G. & E. S. F. Deb. 4¾ 1984	100.00	.82C	4.63	4.52	A	c
1/14	20	Commonwealth Edison S. F. Deb. 4¾ 2009	101.47	.82C	4.55	4.26	Aa	d
1/14	.2	Natural Gas Service Units (Sub. Inc. Deb. 6s 1984 and Common Stock) .	48.00	3.60N	—	—	—	a
1/20	10	Gulf States Utilities 1st 4¾ 1989	102.43	.74C	4.60	4.28	Aa	a
1/21	35	Southern Natural Gas 1st (s. f.) 4¾ 1979	100.00	.89C	4.75	4.52	A	a
1/22	20	Indiana & Mich. Elec. 1st (imp. f.) 4¾s 1988	102.41	.74C	4.60	4.30	Aa	c
1/27	60	Consolidated Edison Conv. Deb. 4s 1973	100.00	N	4.00	4.52	A	f
1/28	35	Transcontinental Gas Pipe Line 1st (s. f.) 5s 1979	98.74	1.10N	5.10	4.76	Baa	a
1/28	12	Central Illinois Pub. Serv. 1st 4¾s 1989	101.61	.73C	4.65	4.30	Aa	a
1/28	7	Northwest Natural Gas 1st (s. f.) 5¼s 1984	100.00	1.10N	5.13	4.76	Baa	a
		Preferred Stock						
1/13	10	Gulf States Utilities 5.08% Pfd.	102.63	1.92C	4.95	4.64	—	c
1/27	.7	Florida Public Utilities Conv. El.12 Pfd.	22.00	1.10N	5.09	4.87	—	a
							Earns.-Price Ratio	
		Common Stocks—Offered to Stockholders						
1/16	15	Pennsylvania P. & L.	50.00	N	5.00	—	6.37%	h
1/22	.7	Mobile Gas Service	22.00	.30N	5.00	—	8.06	k
		Common Stocks—Offered to Public						
1/14	8	Kansas Power & Light	29.88	.78N	4.55	—	6.85	a
1/19	30	Southern Calif. Edison	60.00	1.35N	4.33	—	6.06	a
1/27	7	Central Hudson G. & E.	19.88	.64N	4.03	—	6.10	a

C—Competitive. N—Negotiated. a—Reported the issue well received. c—Reported the issue sold somewhat slowly. d—Reported the issue sold very slowly. f—Offered to common stockholders in ratio of $100 debentures for each 25 shares. Debentures convertible beginning May 1st into common stock at rate of two shares for $100 debenture plus $22 cash ($61). h—Offered to common stockholders on a 1-for-20 basis; 95.8 per cent subscribed, balance sold to employees. k—Offered to common stockholders on a 1-for-10 basis with oversubscription privilege.

Source, Irving Trust Company

methane. Still later Constock and the Gas Council of Great Britain (interested in obtaining larger gas supplies for England) became joint owners and operators of the new $4 million ship *Methane Pioneer.* Constock has also entered into partnership with J. F. Pritchard, a private engineering concern, to build liquefaction tanks in the U. S. and elsewhere.

THE ship contains special tanks built of aluminum-magnesium alloys insulated by balsa wood and jacketed with steel. It has now completed its trial runs and has sailed from Lake Charles, Louisiana, for London with some 32,000 barrels of liquefied methane. In England the gas will be revaporized and mixed with manufactured gas for distribution to customers. The ship is expected to make four or five trial runs to demonstrate the feasibility of the new system.

According to Robert A. Gilbert (*Barron's,* January 12th) methane can produce gas in England at a cost of about 70 cents per Mcf, or less than half of the cost of manufactured gas. Because of its high cost, gas consumption in Free Europe is only about one-eighth as much per capita as in the U. S. There would, therefore, be an almost unlimited market for methane if the new transportation method proves successful.

If the *Pioneer* proves successful, it is contemplated that five or six larger ships would be built costing about $15 million apiece. Huge amounts of low-cost gas are said to be available in Venezuela (where a great deal is being flared), the Middle East, and probably the Sahara Desert, which could be used to supply the big potential demand in Europe. Continental is reported to have optioned a substantial amount of Venezuelan gas around 4 cents per Mcf, and Constock has designed a liquefaction plant for Venezuela to cost about $25 million. It is also conjectured that gas from Alberta, Canada, might be shipped across the Pacific to Japan.

WILL the new kind of gas be used within the United States? Because of the difficulty of obtaining adequate storage facilities considerable gas is sold in the Northeast at low prices to industrial customers during spring and summer months. Reduction to methane would require only 1/600th as much storage space and might prove feasible. According to *Barron's,* Long Island Lighting thinks it could add 300,000 new customers with methane. Venezuela is a possible import source.

Competition for Heating Business

BECAUSE of larger margins of generating capacity over peak load, as well as the desire to balance the growing summer air-conditioning load, a number of electric utility companies including Commonwealth Edison have now established special heating rates. There is growing use of panel and resistance heating, stimulated perhaps by the freakish winters in the past two years, and the number of heat pumps has been increasing.

In a recent talk before the New York Society of Security Analysts, President Clapp of Florida Power Corporation gave some up-to-date information on heat pumps, of which his company is the leading utility promoter. The company now has 9,743 heat pumps (including room units) bringing in an annual revenue of about $1,225,000. Last year sales substantially exceeded those of 1957, being stimulated doubtless by the unprecedentedly cold weather in Florida. Sales in 1958 included 759 residential central units and 1,524 room units; also 272 commercial central units and 960 room units. The

company's sales literature indicates that typical *installed* costs range from $450 for a living room unit to $3,200 for a central heat pump in a 7-room house with 2,000 square feet. A year's operating cost for the living room unit is estimated at $62 for cooling and $11 for heating; for the 7-room house the cooling bill would be $236, and heating $42. These costs would vary somewhat with different locations in Florida.

THERE is apparently little or no competition in Florida between electric heat pumps and the newer year-round air-conditioning gas units, such as the Arkla-Servel type made by Arkansas Natural Gas, but in some other sections in the South competition appears rife. Thus Alabama Gas Company has reported substitution of some gas units for heat pumps in its area, and the report of Chattanooga Gas for the fiscal year ending August 31st, contained the following paragraph:

> In January, 1958 . . . the builder of many all-electric homes in the new Lake Hills subdivision chose Arkla-Servel all-gas heating and air-conditioning units to replace 19 electric heat pumps installed as original equipment in new homes less than a year old. His decision to change from electric to gas in houses which were already sold and occupied by owners had a very real impact upon the air-conditioning market in this area and we continue to benefit from this important event.

RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

Annual Rev. (Mill.)			2/4/59 Price About	Divi-dend Rate	Approx. Yield	Recent Share Earnings	% In-crease	Aver. Incr. In Sh. Earns. 1952-57	Price-Earns. Ratio	Div. Pay-out	Approx. Common Stock Equity
		Pipelines and Integrated Systems									
$ 5	O	Ala.-Tenn. Nat. Gas	25	$1.20	4.8%	$1.62Se	10%	13%	15.4	75%	41%
205	S	American Nat. Gas	66	2.60	3.9	4.44De	13	8	14.9	59	39
58	A	Arkansas Louis. Gas	53	1.20	2.3	1.85De'57	19	47	28.6	65	52
57	O	Colo. Interstate Gas	55	1.25	2.3	1.99Se	NC	—	27.6	63	23
376	S	Columbia Gas System ...	23	1.00	4.3	1.53Se	27	12	15.0	65	44
7	O	Commonwealth Gas	9	—	—	.40De'57	D26	—	22.5	—	77
17	O	Commonwealth N. G. ...	53	2.00	3.8	3.26Se	13	—	16.3	61	43
11	S	Consol. Gas Util.	22	.90	4.1	1.67Jy	D3	6	13.2	54	60
280	S	Consol. Nat. Gas	52	2.10	4.0	3.17Se	D7	12	16.4	66	57
18	O	E. Tenn. Nat. Gas	12	.60	5.0	.83Se	D2	—	14.4	72	20
301	S	El Paso Nat. Gas	37	1.30	3.5	**1.67De'57	13	12	15.5	54	20
46	S	Equitable Gas	38	1.60	4.2	2.21Se	1	4	17.2	72	42
34	O	Houston N. G.	30	.80	2.7	1.48Oc	D10	11	20.3	54	18
20	O	Kansas Nebr. Nat. Gas ..	41	1.80(f)	4.4	2.49Se	D5	12	16.5	72	32
109	S	Lone Star Gas	46	1.80	3.9	2.28Se	D4	10	20.2	79	43
75	S	Miss. River Fuel	38	1.60	4.2	2.00De'57	D14	2	19.0	80	49
26	S	Montana Dakota Util. ...	34	1.00	3.0	1.64Se	11	12	20.7	61	31
25	O	Mountain Fuel Supply ..	28	1.20	4.3	1.53Se	D9	8	18.3	78	62
86	S	National Fuel Gas	24	1.10	4.6	1.43Se	6	—	16.8	77	58
129	S	Northern Nat. Gas	34	1.40	4.1	1.68Se	NC	7	20.2	83	34
43	S	Oklahoma Nat. Gas	29	1.12	3.8	1.71N	30	6	17.0	65	34
117	S	Panhandle East. P. L. ...	57	1.80	3.2	2.74De'57	—	2	20.8	66	41
13	O	Pennsylvania Gas	24	1.20	5.0	2.18De'57	D3	4	11.0	55	59
174	S	Peoples G. L. & Coke ...	54	2.00	3.7	3.08Se	7	7	17.5	65	39
22	O	Pioneer Nat. Gas	34	1.40	4.1	1.85Se	36	13	18.4	76	36
101	S	Southern Nat. Gas	44	2.00	4.5	2.01Oc	NC	4	21.9	100	41
38	O	Southern Union Gas	28	1.12	4.0	1.53De'57	—	10	18.3	73	31
313	S	Tenn. Gas Trans.	36	1.40	3.9	1.78De	11	10	20.2	79	20
175	O	Texas East. Trans.	35	1.40	4.0	2.59Se	14	25	13.5	54	18
96	O	Texas Gas Trans.	34	1.00(b)	3.0	1.98Se	D9	16	17.2	51	27

Annual Rev. (Mill.)		(Continued)	2/4/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1952-57	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
97	O	Transcont. Gas P. L.	24	1.00(b)	4.2	1.46Se	D4	29	16.4	68	21
300	S	United Gas Corp.	39	1.50	3.8	2.42Se	D2	12	16.1	62	41
		Averages			3.9%		4%	9%	18.0	68%	
		Retail Distributors									
32	S	Alabama Gas	35	$1.60	4.6%	$2.56Se	17%	18%	13.7	63%	42%
52	O	Atlanta Gas Light	39	1.60	4.1	2.44Oc	15	11	16.0	66	38
3	O	Berkshire Gas	20	1.00	5.0	1.24N	5	31	16.1	81	39
6	A	Bridgeport Gas	33	1.60	4.8	2.03Se	10	1	16.3	79	50
5	O	Brockton-Taunton Gas ..	19	.95	5.0	1.18De'57	D8	43	16.1	81	41
70	S	Brooklyn Union Gas	58	2.20	3.8	3.21Se	19	13	18.1	69	42
4	O	Cascade Nat. Gas	9	—	—	Def.De'57	—	—	—	—	18
39	O	Central Elec. & Gas	24	1.00	4.2	1.49Se	—	15	16.1	67	18
13	O	Cent. Indiana Gas	17	.80	4.7	1.11Se	—	7	15.3	72	67
6	O	Chattanooga Gas	6	.35	5.8	.41N	D2	17	14.6	85	43
66	O	Gas Service	34	1.52	4.5	2.68Se	66	7	12.7	51	35
8	O	Hartford Gas	45	2.00	4.4	2.31De	21	—	19.7	88	37
3	O	Haverhill Gas	26	1.40	5.4	1.84De	1	14	14.1	76	53
20	O	Indiana Gas & Water ...	26	1.00(b)	3.8	1.52De	8	11	17.1	66	45
52	S	Laclede Gas	22	.90	4.1	1.30Se	12	9	17.0	70	33
5	O	Mich. Gas Util.	22	1.05	4.8	1.19Oc	3	18	18.5	88	34
6	O	Midsouth Gas	17	.57	3.4	1.00Ap	54	7	17.0	57	41
43	O	Minneapolis Gas	33	1.50	4.5	1.73Se	D16	12	19.0	87	42
15	O	Miss. Valley Gas	27	1.20	4.4	2.31Se	67	14	11.7	52	33
5	O	Mobile Gas Service	25	1.10	4.4	1.77Se	44	—	14.1	62	35
7	O	New Haven Gas	39	1.80	4.6	2.36De	4	—	16.5	76	68
15	O	New Jersey Nat. Gas ...	44	1.60(h)	3.6	2.62Se	13	—	16.8	61	34
80	O	No. Illinois Gas	26	.88	3.4	1.44N	7	—	18.1	61	54
9	O	North Penn Gas	13	.60	4.6	.85Je	D5	8	15.3	71	58
16	O	Northwest Nat. Gas	18	.72	4.0	* .95De	D6	4	*19.0	76	39
240	S	Pacific Lighting	54	2.40	4.4	2.76De	14	—	19.6	87	36
10	O	Piedmont Nat. Gas	31	1.00	3.2	1.96Se	54	—	15.8	51	25
2	O	Portland Gas Lt.	15	.75	5.0	2.31De	128	31	6.5	32	27
9	A	Providence Gas	12	.56	4.7	.50De'57	D10	13	21.4	100	50
3	A	Rio Grande Valley Gas ..	4	.24	6.0	.32Je	24	8	12.5	75	52
6	O	So. Atlantic Gas	17	.80	4.7	1.39Ma	43	5	12.2	58	30
12	S	So. Jersey Gas	49	1.60	3.3	2.35De	7	24	20.9	68	47
29	S	United Gas Impr.	53	2.20	4.2	3.15De	27	5	16.8	70	64
51	S	Wash. Gas Light	50	2.24	4.5	3.37De	21	2	14.8	66	41
11	O	Wash. Nat. Gas	17	(g)	—	.54Se	13	—	—	—	41
8	O	Western Ky. Gas	16	.60(i)	3.8	1.46Se	135	4	11.0	41	38
		Averages			4.4%		23%	10%	15.9	69%	

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER STOCKS

Annual Rev. (Mill.)			2/4/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1952-57	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
		Communications									
		Bell System									
$6,313	S	Amer. T. & T. (Cons.) ..	233	$9.90†	4.2%	*$13.91N	6%	3%	*16.7	71%	64%
303	A	Bell Tel. of Canada	44	2.00	4.5	2.00De'57	D11	—	22.0	100	66
46	O	Cin. & Sub. Bell Tel.	95	4.50	4.7	4.93De'57	D12	1	19.3	91	100
232	A	Mountain Sts. T. & T. ..	146	6.60	4.5	9.21N	D1	3	15.9	72	73
324	A	New Eng. T. & T.	166	8.00	4.8	8.54Se	3	2	19.4	94	55
864	S	Pacific T. & T.	157	7.00	4.5	8.81N	14	1	17.8	79	59
108	O	So. New Eng. Tel.	45	2.00	4.4	1.90De'57	D13	—	23.7	105	64
		Averages			4.5%		D2%	1%	19.2	88%	

Annual Rev. (Mill.)		(Continued)	2/4/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1952-57	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
		Independents									
5	O	Anglo-Canadian Tel.	42	$1.20	2.9%	$3.11Se	D4%	56%	13.5	39%	55%
41	O	British Col. Tel.	41	2.00	4.9	1.90Se	D27	5	21.1	105	31
4	O	Calif. Inter. Tel.	16	.70	4.4	.83Se	D24	—	19.3	84	24
18	O	Calif. Water & Tel.	27	1.20	4.4	1.54Je	1	—	17.5	78	48
18	O	Central Tel.	27	1.00(b)	3.7	1.79Se	D6	10	15.1	56	28
5	O	Commonwealth Tel.	20	.90	4.5	1.24Je	D16	—	16.1	73	37
4	O	Florida Tel.	29	.90	3.1	1.00My	D10	1	29.0	90	46
289	S	General Telephone	61	2.00	3.3	3.12N	2	32	19.6	64	34
18	O	Hawaiian Telephone	22	1.00	4.5	*1.13Se	D12	7	*19.5	88	43
7	O	Inter-Mountain Tel.	16	.80	5.0	.94De'57	17	2	17.0	85	63
21	O	Rochester Tel.	26	1.00	3.8	1.29Oc	NC	—	20.2	77	33
4	O	Southeastern Tel.	23	.90	3.9	1.11De'57	D21	—	20.7	81	54
10	O	Southwestern St. Tel. ...	26	1.20	4.6	1.53N	NC	4	17.0	78	35
34	O	United Utilities	30	1.25	4.2	1.54De'57	D6	1	19.5	81	40
15	O	West Coast Tel.	26	1.00	3.8	1.18Se	D22	4	22.0	85	35
260	S	Western Union Tel.	34	1.20	3.5	2.03De'57	D8	—	16.7	59	85
		Averages			4.0%		D10%	7%	19.0	77%	
		Transit Companies									
21	O	Baltimore Transit	6	—	—	$1.01De'57	124%	—	5.9	—	41%
12	O	Cincinnati Transit	5	$ .30	6.0%	.52De'57	9	—	9.6	58%	49
65	S	Fifth Ave. Coach	19	—	—	2.46De'57	D29	—	7.7	102	68
308	S	Greyhound Corp.	19	1.00	5.3	1.22De'57	D4	—	15.6	82	45
25	S	Nat. City Lines	30	2.00	6.7	2.74De'57	12	9%	10.9	73	94
13	O	Niagara Frontier Trans. .	9	.60	6.7	.77De'57	35	—	11.7	78	78
65	O	Phila. Trans.	8½	.60	7.0	1.23De'57	D25	—	6.9	49	38
17	A	Pittsburgh Rys.	11	.25	2.3	Deficit'57	—	—	—	—	90
6	O	Rochester Transit	5	.40	8.0	.64De'57	D6	29	7.8	63	100
22	O	St. Louis P. S.	11	1.00	9.1	.57De'57	D17	19	19.3	175	94
15	S	Twin City R. T.	12½	1.20	9.6	1.01De'57	D16	—	12.4	119	53
21	O	United Transit	5½	.60	10.9	.87Ma	D1	11	6.3	69	51
		Averages			7.2%		7%	—	10.4	87%	
		Water Companies									
		Holding Companies									
43	S	American Water Works .	15	$ .60	4.0%	$ .96Se	D2%	5%	15.6	63%	17%
		Operating Companies									
5	O	Bridgeport Hydraulic ...	34	$1.70(f)	5.0%	$2.05De'57	D2%	5%	16.6	83%	53%
15	O	Calif. Water Service	56	2.40(j)	4.3	3.28De'57	D1	6	17.1	73	33
4	O	Elizabethtown Water ...	49	2.00	4.1	3.90De'57	19	30	12.6	51	58
11	S	Hackensack Water	46	2.00	4.3	3.18De'57	11	6	14.5	63	38
8	O	Indianapolis Water	24	1.00	4.2	1.26De'57	D11	—	19.0	79	35
6	O	Jamaica Water	42	2.20	5.2	2.86Se	D1	—	14.7	77	26
5	O	New Haven Water	67	3.40	5.1	2.30De'57	D20	—	29.1	148	61
2	O	Ohio Water Serv.	30	1.50(b)	5.0	1.63Se	D38	10	18.4	92	32
8	O	Phila. & Sub. Water	46	.50(b)	1.1	2.84Se	D15	7	16.2	18	28
2	O	Plainfield Un. Water ...	63	3.00	4.8	4.42De'57	D12	2	14.3	68	63
4	O	San Jose Water	55	2.60(f)	4.7	3.96De	10	9	13.9	66	42
10	O	Scranton-Springbrook ...	24	1.00	4.2	1.57Se	6	7	15.3	64	29
5	O	South. Calif. Water	19	.80	4.2	1.19N	NC	12	16.0	67	31
4	O	W. Va. Water Service ..	22	.68(d)	3.1	1.55Se	D17	9	14.2	44	17
		Averages			4.2%		D6%	7%	16.6	70%	

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. NC—Not comparable. NA—Not available. D—Decrease. *On average shares. **On combined common and common B. †Rate raised to $9.90 effective next July ($3.30 on split shares). (a)—Adjusted to eliminate 13 cents per share of nonrecurring tax savings. (b)—Also stock dividend in 1958. (d)—Also 1 per cent stock dividend quarterly. (e)—Also 10 per cent stock dividend May 19, 1958. (f)—Includes extras. (g)—Four per cent stock dividend June 6, 1958. (h)—Also 2 per cent stock dividend December 1, 1958. (i)—Also 5 per cent stock dividend December 29, 1958. (j)—Also 5 per cent stock dividend March 19, 1959.



What Others Think

New York Commission Report on the Plight of Rail Passenger Service

THE state public service commission on January 30th submitted to Governor Nelson A. Rockefeller and the legislature the report of its investigation of the financial condition of the railroads operating in New York state, in compliance with a joint resolution of the legislature of March 25, 1958. The resolution directed the commission to make an inquiry ". . . for the purpose of evaluating the need and formulating recommendations for state and local government action pertaining to passenger transportation service problems in general and the taxation of railroad franchises and properties in particular."

The report lays bare the ills of the carriers and outlines a series of measures for state and federal action, some specific for immediate application, others for exploration, but it warns the railroads that whatever assistance is provided is predicated solely on the assumption that they are willing to meet their obligation to continue safe and adequate service to the public.

The investigation was made under the general direction of the late Chairman Benjamin F. Feinberg and the report was in the process of preparation when Mr. Feinberg became gravely ill and retired on December 17th. The report was adopted unanimously by Acting Chairman Spencer B. Eddy and Commissioners Francis T. Mylott, Richard H. Balch, Aaron L. Jacoby, and James M. Landis (serving an interim appointment). Commissioner Landis filed a concurring supplemental memorandum. (Chairman James A. Lundy has since been designated by Governor Rockefeller.)

Recent Improvement Noted Though Problem Persists

THE report notes that the financial condition of the railroads improved in the latter part of 1958 as a result of the revival of the national economy which gave impetus to the carriers' freight business and, together with an increase in mail pay rates which was accompanied by a $51 million lump sum award for past service, has relieved the threat of impending bankruptcy which clouded the railroads to a considerable extent in 1957 and the first part of 1958. A marked reduction in operating expenses, particularly in maintenance, also helped some of the state's carriers to end the year in the black.

Though there has been a seeming improvement, the report declares there is urgent need for action to stem the attrition of passenger service and points out

the perils that such a withering away of part of the industry will pose to other segments of railroad operations (freight, mail, express, baggage, etc.) and the totality of the threat therefrom to the nation's economy and national security.

On the basis of the data produced by a staff of experts in ten months of searching inquiry, the report concludes that the extent of assistance (or relief) needed to save railroad passenger service from extinction can materialize *only* by concerted action of federal, state, and local governments, with the railroads, labor, and the public joining in the effort.

The railroads' financial problems stem from continuing passenger deficits (a substantial part of which are incurred in mail, express, baggage, dining car service, etc.). The report stresses the fact that the passenger losses of the roads operating in New York, which reportedly exceeded $200 million in 1957, are a system-wide interstate problem with which New York or any other state singly cannot cope and the national government, therefore, must provide concerted guidance and substantial assistance to the carriers if their problems are to be resolved.

State and Federal Action Recommended

THE commission alludes to the proposed report of the Interstate Commerce Commission in its investigation of rail passenger deficits in which the author of that document purported to see no future for continuance of intercity passenger operations. That report (Appendix 49 in PSC Report) paints a dark picture of the future of all rail passenger operations and has virtually consigned the passenger coach to the transportation museum. The commission takes strong exception to such an attitude and urges changes in the national transportation policy evidenced by the ICC report.

The commission's report and Commissioner Landis' concurring memorandum stress the need for the preservation of passenger service, particularly commutation service. To deal with the problem of relief that New York state can provide alone, and federal measures that should be applied, the report recommends the following action:

By the State

1. A temporary (two-year) "freeze" of the tax base for railroad property, the maximum being no higher than the current imposts. (This, the report states, will prevent conditions from getting worse.)

2. Exemption from taxes of grade-crossing structures to be built in the future.

3. No taxes on future installations of safety devices at grade crossings.

4. No taxes on improvements made to replace existing facilities.

On Federal Level

On the national level the report urges the following immediate steps:

1. That Congress ease the impact of federal tax laws upon the industry, starting with immediate repeal of the 10 per cent excise tax on rail passenger tickets (to stimulate travel).

2. Increase the railroads' share of total federal transportation expenditures by ceasing the diversion of large amounts of mail to competing carriers.

3. Payment to the railroads of fully compensatory rates for performance of this service.

4. Amendment of the Internal Revenue Code to preserve for the railroads the benefit of increases in income arising out of any and all forms of state and local tax relief so that 52 per cent or more thereof would not be siphoned

away into the federal Treasury by the operation of the present income tax law.

Additional Measures to Be Explored

THE report states that much more needs to be done to help the roads and suggests additional measures to which consideration should be given:

(a) Creation of a state agency with requisite authority for the concentration of effort to preserve vital rail passenger service, commutation service in particular.

(b) Exploration of the extent to which the "lease-agency" device can be applied as a factor in helping other commuter carriers. (Under the "lease-agency" plan, the city of New York makes up part of the deficit of the Staten Island Rapid Transit Railway to the extent of the taxes the railway would normally pay.)

(c) Labor costs account for approximately 65 per cent of the total operating expense budget of the railroads in this state and are a product of collective bargaining between the railroad brotherhoods and railroad managements. The report declares that some of the brotherhood-management "make-work" arrangements and the staffing provisions of the State Full Crew Law warrant a re-evaluation of labor-management negotiated accords, and legislative reconsideration of requirements under the Full Crew Law.

(d) Public authority (tax-free) operation affords another approach in the railroad problem. Although the public authority device is in reality public ownership in a more palatable form, it has, nevertheless, been resorted to in other intrastate fields in New York (water and housing, for example). The Port of New York Authority is cited as an outstanding example of successful operation in the interstate transportation field.

(e) Modification of tax laws, particularly with a view to the elimination of inequities and discriminatory practices as a matter of simple justice to the railroads.

(f) Subsidies in the form of tax reduction and other forms of financial subsidy when and where necessary.

Constructive Potential of A State Agency

IN the somber picture the report draws of the railroad industry, one of the most hopeful aspects is that which contemplates the constructive potential of a state agency to come to grips with the problem.

The former Long Island Transit Authority, which after several years of effort brought together all segments and parties at interest in the successful rehabilitation of the Long Island Rail Road, is cited as an example of what such an agency might be able to do. Admittedly, the magnitude of the present problem involving interstate railroads operating in New York, among them several of the principal carrier systems in the country (New York Central, Pennsylvania, New Haven, Lackawanna, etc.), rivals the troubles of the Long Island Rail Road at their worst.

Nevertheless, the report urges, the possibilities of such an agency, even in the face of a task as huge as it would confront, deserves earnest consideration.

The report does not envision that a state agency such as is suggested could necessarily apply the pattern of the Long Island Rail Road Redevelopment Act to an interstate system extending across many states. Its prime function would be to press for and co-ordinate vitally needed measures within New York and between New York and adjoining states for the preservation of commuter and other essential passenger operations.

Tax Relief a Complex Problem

THE report contains statistical data on every aspect of the railroads' financial problems for the years 1955, 1956, and 1957. It is the most thorough study in depth ever made of the railroad industry in New York. Each of the 47 railroads operating in the state was analyzed separately and the results were correlated on an industry-wide basis. In the course of the study every phase tackled by the investigating staff resolved itself into numerous subsidiary problems, all converging into a web of local, state, and nation-wide ramifications.

In the field of taxation, the report cites examples of discriminatory treatment of the railroads. Thousands of taxing authorities, governed by an ambiguous tax statute, assess and tax railroad property for various purposes under widely varying procedures. In addition, special franchise tax assessment practices have tended to perpetuate injustices to the carriers, the report declares. Finally, the federal government imposes a myriad of taxes and assessments for a multiplicity of purposes that exceed state and local exactions.

The report is critical of the New York state tax system, under which local tax authorities collected $43.7 million, or approximately 97 per cent, of the $45.1 million railroad tax bill in 1957. It is pointed out that the real property tax bears little relation to the railroads' earning experience and frequently it is in the wrong direction.

FOR example, between 1955 and 1957, the combined net income of the state's carriers dropped from $165 million to $76 million, a decline of 53 per cent. In the same period the real property tax was boosted by nearly 10 per cent, from $38.9 million to $42.5 million. Moreover, the existing tax laws contain few guideposts for the assessors. Judicial decisions on review of assessments demonstrate that lands, and fixtures affixed thereto, are often valued under divergent procedures and too often inconsistently from year to year. This is the basis of the commission's recommendation for a property "tax freeze" (to keep conditions from getting worse) pending the conclusions of the State Board of Equalization and Assessment, which is currently studying the whole tax problem in the state. An initial report by the board is expected some time in March, 1959.

Deficits and Taxes a National Problem

THE report is emphatic that the preservation of long-haul interstate and intercity passenger service is primarily a national problem. The following figures bearing on deficits and taxation of the New York railroads illustrate the point.

A study of the reports of the larger interstate systems operating in New York indicates passenger deficits of $171.5 million in 1955, $191.7 million in 1956, and $201.4 million in 1957. There exists no breakdown of the reported deficits as between New York and other states. Obviously, a large part of the deficits was incurred in operations outside of New York. It is clear, therefore, that New York alone cannot solve the total passenger deficit problem short of subsidizing the deficits incurred in other states.

On the score of taxation, the railroad reports show that for 1957 they accrued a total of $248 million for local, state, and federal taxes. It is shown that the federal government takes the biggest slice of the total tax pie. An example of this is the tax accruals of the New York Central Railroad.

In 1957, the Central's accruals amount-

ed to $67.5 million. Of that amount $21.5 million, or 33 per cent, were for New York state; $17.2 million for 10 other states and countries (Canada, Mexico); and $27.1 million for the federal government. Thus it is clear that New York state singly cannot alleviate the tax problem of the Central when 67 per cent of its tax bill is earmarked for its operations outside of New York and for the federal government.

With these facts in mind, the commission goes on to say:

> No action by a single state can insure the continuity of such (passenger) services, even within its own borders. We are compelled to look to Washington for its regulation (alluding to the Federal Transportation Act of 1958 which divested state commissions of much of their regulatory powers). We must also look primarily to Washington for its salvation. And immediate action is called for. (See above under recommendations "On Federal Level.")

ICC Cautioned on Service Curtailments

THE report contains a plea to the ICC for restraint in the use of its newly acquired powers under the Federal Transportation Act whereby that U. S. agency, at its discretion, may, on notice from railroads, allow them to discontinue portions of interstate passenger operations. The report points out that in any termination of service substantial operating costs of the segment abandoned must inevitably be absorbed by the remaining operation which is already heavily burdened with costs and taxes. Unless the ICC acts with restraint, the report states, virtually all interstate rail passenger service in the Northeast is doomed to extinction and, as an inevitable consequence thereof, so is virtually all intrastate service despite any state and local action to preserve it.

The report cites this example. If the New York Central's commuter service on the east shore of the Hudson (Hudson and Harlem divisions) and under Park avenue to Grand Central station, now per se profitable, should be made to absorb the total costs involved in the maintenance and operation of those lines and of that terminal facility, that commuter service would become prohibitively expensive for the Central and the commuters to operate and finance—except with the aid of contributions from the public treasuries in very substantial amount.

"It is for this reason," the report states, "that we are and everyone else involved should be vitally concerned with each resort to this new statutory lever (the Federal Transportation Act) by which all passenger train service potentially can be doomed."

Commissioner Landis Assails ICC Cost Allocations

IN his concurring memorandum, Commissioner Landis is in general agreement with the recommendations of the report, but he assails the use of the ICC formula for the allocation of common operating costs between passenger and freight operations as a means of measuring passenger deficits. Under the ICC method, he holds, passenger service is loaded with costs that would be incurred even if that service were totally discontinued. Thus the ICC allocation formula, he points out, creates a distorted picture of the size of the passenger deficits. He accuses the railroads of using this formula as a propaganda weapon to exaggerate their financial difficulties and as a threat to get rid of passenger operations in order to obtain subsidies.

In this respect Commissioner Landis goes beyond the criticism leveled at the ICC formula in the main report. The com-

mission states, however, that regardless of the allocation method employed, the situation has degenerated from a point where the railroads made a profit to a point in 1957 where, on the New York Central System, for example, even if all costs of tracks, signals, and the like, used jointly by freight and passengers were allocated to freight alone, the receipts from the passenger part of the business still fail to cover the direct expenses of passenger operation.

ONE of the difficulties with the ICC figures, according to Commissioner Landis, is that neither revenue nor costs are related to state problems. This, he declares, is relevant in dealing with such measures as state tax relief or state subsidies. He cites the fact that between 75 and 95 per cent of track mileage of three of the principal passenger carriers (New York Central, Pennsylvania, and New Haven) lie outside the state, and he states:

> For all we know, factors, unless we can pin them down, that make for unnecessary and excessive costs may be due to operations over which this state has no jurisdiction and such relief as this state may give may simply subsidize the uneconomic approaches taken by other states.

Commissioner Landis sees serious gaps between passenger service revenues and the cost of operating that service. These gaps, he states, are likely to increase rather than diminish, even though the extent of these gaps in the past year and a half has been exaggerated by the business recession.

He endorses the recommendation in the report for the establishment of a state agency to deal with transportation problems and emphasizes the need for thorough exploration of all possible measures for the preservation and improvement of commutation service as a matter of vital concern to the individual commuter as well as in the interests of suburban development. He also advises amendment of the Federal Transportation Act of 1958 ". . . to prevent the ICC from being stampeded into permitting the abandonment of needed service," and the establishment of a federal department to deal with transportation matters.

APPENDED to the report is an analysis by Professor of Economics Jack C. Myles of Utica College, Syracuse University, of the data compiled by the public service commission staff. By a slightly different process, he arrives at the same conclusions as the commission and Commissioner Landis.

Summing up, the report by the whole commission states in part:

> Tax relief, subsidies, or other suggested remedies are useless unless there is a desire on the part of the railroads to continue in the passenger business, and any relief suggested here is predicated solely on the assumption that the railroads are willing to meet their obligation to render service to the public.
>
> As we have indicated and as Commissioner Landis so well stresses, many of our railroad problems can only be met upon a national basis. This, however, is no reason for this state to sit idly by. It is all the more reason why an agency directly and immediately responsible to the Executive is required, forcefully and continually, to present the needs of the people of this state to our sister states and to those who are responsible for our national policy.

Journey in Electronic Land

HOUSE organs of public utility companies often reveal a wealth of ingenious presentation of complex materials in simplified and interesting form. Since these magazines are primarily designed for the information if not the special education of the busy employee, it is a challenge to the resourcefulness of the house organ editors to serve up what is often pretty drab technical stuff in an inviting, attractive package.

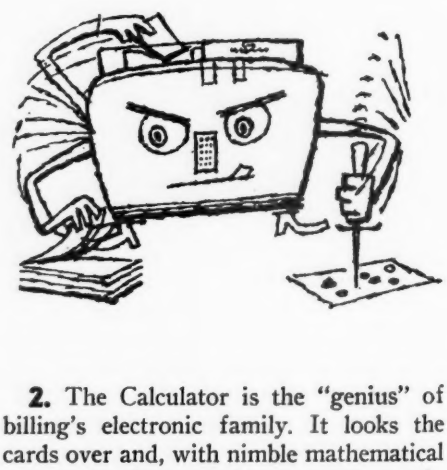
The house organ editors must meet the challenge of competing for the employee's spare time with all his extracurricular activities, including the needs at home, TV, social sessions, and recreation, to say nothing of the sports page and other types of reading material.

A good example of how the well-edited house organ often rises to this challenge may be seen in *Sunshine Service News*. In its issue dated October, 1958, this organ of the Florida Power & Light Company contained an article by Lory Snipes which undertook to explain to employees what happens to the electric bill each month in its journey through the various electronic processes of metering, calculating, billing, assorting, duplicating, addressing, mailing, etc. Mr. Snipes undertook to explain this formidable series of operations—done as it is with modern automatic electronic equipment—by breaking it down into a series of twelve steps and with the use of amusing cartoons personalizing the appearance and operations of such equipment.

THE title of his article, "Journey in Electronic Land," invites the reader to start with the meter reader as he records the customer's metered consumption on a billing card with a special pencil containing sensitized lead. In the case of Florida Power & Light, these are all dispatched to the company's main billing center in the Ryan building in Miami. There the cards are collected in batches of about 33,000 for processing. Chances are the boss, as well as the employee, would get quite a charge out of reading about this "journey" as it is explained in the house organ *Sunshine Service News*.

FOLLOWING is a brief one-paragraph text of the twelve steps, with some of the cartoons:

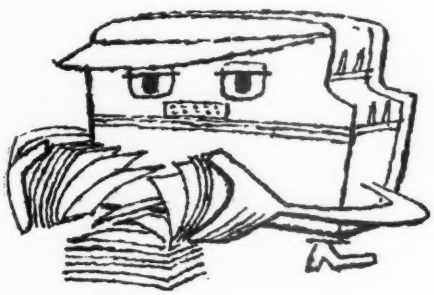
1. First stop is the Mark Sense Reproducer. This sharp-eyed machine scans 100 cards a minute and translates the pencil marks to "punched card language"—a series of small holes. With this done, the other machines can understand the data in the cards.



2. The Calculator is the "genius" of billing's electronic family. It looks the cards over and, with nimble mathematical gymnastics, figures each customer's monthly electric bill. The machine does not take any chances with this important step, and checks itself by calculating every bill twice before punching the data into the card.

The entire process is clicked off at 100 cards per minute.

3. The cards now go to an accounting machine which thinks big. That is, its main concern is large totals. It combines the revenue from all the cards into rate categories and shows total money due from residential customers, commercial customers, street lighting, etc. These totals are used for control checks during the rest of the billing process and are later sent to the general accounting office of FP&L's treasury department.

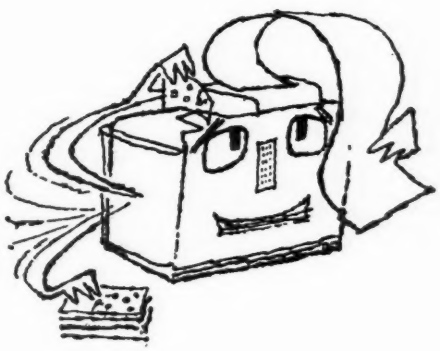


4. For every FP&L customer, an address card, similar in appearance to a reading and billing card, is kept on file in the Ryan building. The reading and billing cards are merged with the proper address cards by the Collator, a machine which shuffles the card decks like a dealer in a poker game.

5. The next accounting machine collects all the information in the merged cards and prints it on a form called the Customer Register. It checks itself by balancing its totals with figures produced in step three. This complete, up-to-date information sheet is sent out to each district office for reference.



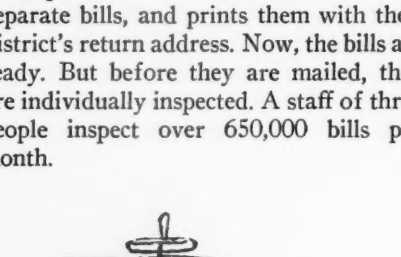
6. Now, the reading and billing cards must be separated from address cards. This job falls to the Sorter, fastest machine in the department. It knocks the work off at 1,000 cards a minute. The average card batch is sorted in three minutes.



7. The customers' bills start to take shape as the reading and billing cards are placed in a machine which uses their information to print the amount side of the bill. This operation is dashed off at the rate of 150 cards per minute.

8. Another accounting machine prints the address side of the bill. In this step, only the address cards are placed in the machine.

9. The final step in preparation of the bills is performed by a brawny machine of several talents, the Burster-imprinter. This vigorous unit trims the continuous strip of bills, perforates them, bursts them into separate bills, and prints them with their district's return address. Now, the bills are ready. But before they are mailed, they are individually inspected. A staff of three people inspect over 650,000 bills per month.



10. The reading and billing cards have done their jobs in helping produce the bills, but they must leave "offsprings" for the next generation of bills. So the cards are placed in a Reproducer and the static data are punched into a new reading and billing card.

11. The new cards go to an Interpreter which reads the holes and converts them to printed data on the cards.

12. Finally, the address cards are used in the last step by a machine to print the customers' names, addresses, and meter numbers on the new reading and billing cards. The cards are now ready to be mailed back to the district office, where



they will be used by meter readers to start a new cycle.

As a matter of fact, visitors to the Florida Power & Light office building are usually amazed at the array of complex electronic machinery and its fantastic speed of operation. These bills are processed at the rate of some 4,000 an hour, which amounts to 32,000 bills a day. This punch card process is quite generally used in various forms by larger utility companies all over the country. It is another one of those hidden miracles of modern efficient operation of which the customer is likely to have no knowledge whatever. Too often that is true of a good many of the utility company's own employees.

It takes bright, imaginative articles such as the Snipes piece in *Sunshine Service News* to carry the message through to the rank and file. It is an impressive reminder of the long steps taken by modern utility management to render more efficient service to the utility customer.

American & Foreign Power Safety Contest

THE American & Foreign Power Company recently awarded the first six bronze plaques in its new accident prevention contest. This was the first safety contest of the American & Foreign Power System where the individual operating companies competed against one another. In the previous contests the competition was arranged on a country-by-country basis, based on the overall performance of all Foreign Power System companies in each country. It was felt that this new arrangement gave each single company the best opportunity to demonstrate its capabilities in accident prevention work.

The associated companies which operate in eleven Latin American countries were divided into four groups. The first group of electrical operating companies had over 750 employees each; group 2 had 350 to 749 employees; group 3 less than 350 employees; and group 4 included all the other types of operations, such as telephone, gas, tramways, and launches.

This first contest started in April and ended in September. This particular time was selected so that all the statistics could be tabulated and the plaques engraved in order to have the presentation ceremonies at the annual executives' conference of American & Foreign Power Company and Ebasco International Corporation, which is held in New York each December.

Two awards were presented in each of the three groups. The first award was the "Safety Award" and was won by the company with the lowest Injury Index for the contest period (Injury Index = Frequency Rate + 10 × Severity Rate). The second award, "The Improvement Award," was won by the company achieving the greatest reduction in the Injury Index. A comparison was made with the Injury Index of September, 1957, for this purpose. Special mention was given to those companies in group 4 for notable records.

The winning companies and their records are as follows:

Group 1

Safety Award—Pernambuco Tramways & Power Co. Ltd. (Brazil) Injury Index 3.27

Improvement Award—Cia. Paulista de Forca e Luz (Brazil) Injury Index Improvement Points 42.20

Group 2

Safety Award—Empresa Electrica del Ecuador, Inc. (Ecuador) Injury Index 1.58

Improvement Award—Cia. Cubana de Electricidad Santa Clara division (Cuba) Injury Index Improvement Points 56.47

Group 3

Safety Award—Cia. Electrica de Merida (Mexico) Injury Index 0

Improvement Award—Cia. Forca e Luz Nordeste do Brasil (Brazil) Injury Index Improvement Points 101.92

THIS first contest was very successful. Considerable enthusiasm was shown by all companies and many accident prevention campaigns were planned around the contest. The American & Foreign Power Company intends to make this a permanent annual event, but with the contest running for a full year.

As a result of this and similar accident prevention contests and campaigns, the acceptance of individual responsibility for correct safety practices has steadily increased in all Latin American countries.

Growth of Electric Power

It is a push-button age, a recent "Business in Brief" bulletin of The Chase Manhattan Bank of New York declares. It points to the phenomenal growth of the electric power industry as one outstanding proof. The growth of power is both a cause and effect of the dynamic expansion of the nation's economy.

Production of electric power has more than doubled in the past eight years. This year it is estimated that well over 600 billion kilowatt-hours of electrical energy will be produced. A primary user of this power is industry—the manufacturers and processors—who currently consume about 45 per cent of the total output.

Residential use of power has shot up tremendously, too. The average home consumption today is more than 3,000 kilowatt-hours yearly—a rate that has doubled in the last ten years. Yet, despite this soaring use of electricity, its average cost per kilowatt-hour has fallen. Thirty years ago a residential customer paid almost three times as much per kilowatt-hour as he does today. Although rate schedules have had to be revised with rising costs, the consumer's average charge has continued to fall, for rate schedules generally decline as usage expands. Additional consumption of power in the home has brought use-economies into most households.

Chase Manhattan reports that to maintain and extend their record of furnishing power at minimum rates, the electric utilities have consistently sought to utilize the most modern facilities. Year after year their expenditures on new equipment have played an important rôle in the overall construction outlook. It takes $4 of investment to produce $1 of revenue from electric power. In 1958 the electric utilities were expected to account for almost one-seventh of the total national outlay for new plant and equipment. The financing of these new plants has posed a major problem for the utilities. Well over $50 billion has been required since 1950. To raise these funds the privately owned electric power companies sold $9.2 billion of bonds, $1.6 billion of preferred stock, and $3 billion of common stock. The rest came from reinvested earnings. Fully one-fifth of all the security offerings made during the postwar period have emanated from the electric utilities.

A steady improvement in efficiency has been one of the results of this heavy capital investment outlay by utilities. In terms of the amount of coal needed to produce one kilowatt-hour of energy, the cost has declined from more than two pounds per kilowatt-hour in 1925 to less than one pound per kilowatt-hour today.

Another factor in the utilities' expansion has been the increase in the "load factor," which is the average utilization of capacity throughout the year. Seasonal patterns of electricity consumption seem to be leveling out.

The dynamism of the electrical industry is brought into sharp focus when one examines the possibilities in its future. Since electric power output has doubled almost every ten years from the early 1900's, it is possible that by 1980 the power use in the U. S. could be approximately *three times the present levels.*

Fully electrified homes, including heat pumps, are one of the big current-using potentialities of the future. Such homes would use about 25,000 kilowatt-hours a year—almost eight times today's national average.

The March of Events



Gas Rate Increase OK'd

THE Federal Power Commission has allowed Phillips Petroleum Company to raise its rate on natural gas sold to Panhandle Eastern Pipe Line Company. This is a reversal of a previous decision which was overruled by a U. S. court of appeals. However, the commission ruling required Phillips to make a small refund to Panhandle because it had been charging a higher rate than that allowed in the new FPC decision. The refund amounts to about $67,500 if paid promptly.

Phillips had been charging Panhandle 3.18236 cents per thousand cubic feet in 1954, but two years later asked to raise the charge to 3.69863 cents. An FPC examiner found it should be 3.46363. The commission reversed this finding, but was told to accept the examiner's price finding by the U. S. court of appeals.

Since August 15, 1957, Phillips has been charging 3.9102 cents, a rate the FPC allowed to go into effect subject to refund after Phillips asked for a second increase in the rate. The difference between the rate upheld by the court and this amount is what Phillips will have to refund to Panhandle Eastern.

U. S. and Canada to Share Power

THE United States is now considering Canadian rights to a share of the power generated at dams on the American section of the Columbia river through use of water from storage dams on the Canadian part of the river.

Heretofore the U. S. section of the International Joint Commission had never admitted that Canada had such rights. Actually it had never made up its mind on the subject. Now, however, the Canadian and U. S. governments have asked the commission to recommend soon a division of the benefits resulting from a co-operative water storage system, especially those concerned with electric power and flood control. It may be some time before a formula is worked out that will be satisfactory to everyone. But when this is accomplished the two governments will have to accept it subject only to approval by British Columbia.

District of Columbia

Emergency Rate Boost

THE Potomac Electric Power Company sought and obtained an emergency rate increase from the public service commissions of the District of Columbia, Maryland, and Virginia in the amount of $4,819,157. After taxes, the

net amount of additional annual income to the company will be about $2,171,000. To the average residential customer who uses about 270 kilowatt-hours of electricity a month, the increase will come to 55 cents more on his monthly bill.

Pepco spokesmen said the company needed the increase so that its earnings would be restored to the same rate of return the commission found proper in 1955 and to compensate for a declining level of earnings. Moreover, the company contended, it needed to continue a large construction program which would require $31 million from investors in 1959.

Pepco emphasized that the asked-for, quick rate increase was merely a stopgap until it could prepare a full-scale rate case in which it would seek a substantial increase in its allowed rate of return.

Georgia

REA Co-op Bill Battle

A CONTROVERSIAL bill, which would allow electric co-ops to continue operating in recently annexed municipal areas which they already are serving, has passed the state senate after a tough fight.

It next will be assigned to the house industry committee. It is believed it will have a hard time getting out of committee. The co-ops have agreed to an amendment that will allow cities to collect a 3 per cent franchise tax on the condition that they will approve the bill.

The Georgia Municipal Association has been opposing the bill, chiefly on the grounds that the electric co-ops are tax-exempt until 1961.

A showdown battle is expected on the measure before it is brought to a vote.

Maryland

Bills to Slow Rate Hikes

LEGISLATION has been introduced in both the senate and the house of the state legislature which would make it more difficult to win rate increases by utilities in Maryland. Originally recommended by a legislative committee to study the Maryland Public Service Commission, the legislation would strengthen the position of the people's counsel in opposing fare and rate boosts. The new measures would give the people's counsel his own technical and clerical staff and money to handle cases.

Another recommendation would limit utilities in business deductions for rate-setting purposes to the amount of money allowed to the people's counsel. This is an attempt to equalize the amount of money spent by utilities for legal help in a rate case with that of the counsel representing the people.

The new measures would also make the chairmanship of the commission a full-time appointment and raise the salary from $9,000 to $15,000 a year.

A stricter definition is also sought in the bills for what constitutes "just and reasonable rates" and a study of the relationship between regulated utilities and their unregulated subsidiary organizations.

Missouri

No-strike Law Repeal

EVER since 1949 the house labor committee in the state legislature has been trying to obtain repeal of the King-Thompson utility no-strike law without success.

And ever since 1949 and now in 1959

the same committee has been reporting unfavorably on the law which has been on the books for twelve years. And yet, despite the fact that labor is eager to see the law repealed or amended, it has never passed.

Now, however, a majority of the twenty-seven members of the house labor committee is identified with or associated with labor unions.

If the house labor committee runs true to form and reports favorably on the bill to repeal the antistrike law, history will have repeated itself eleven times. Whether the bill will pass when put to a vote remains to be seen.

New Hampshire

Electric Rate Raise

THE state public utilities commission has authorized an increase of more than $500,000 a year in New Hampshire electric rates. This will boost the average household bill by about 15 cents a month.

The commission majority announced that the rate increase would be retroactive to last October 1st, once it approves the new rate tariffs. However, the state supreme court is studying a state request that it throw out a public utilities commission order making the rate boost retroactive.

New Jersey

Transit Agency Voted

THE New Jersey senate has approved the creation of a state agency to keep transit facilities operating until a long-term solution to the commuter problem can be found. The measure was adopted by a vote of 18 to 0 and sent to the assembly.

The new state agency will be known as the Division of Railroad Transportation. It will work with New York state, as well as Connecticut, if the latter so desires.

The governor of New Jersey, Robert B. Meyner, had been preparing to name a state co-ordinator of railroad transportation. He made it clear, however, he would be satisfied with either a co-ordinator or a new state agency.

The Rockefeller administration in New York recently announced that it was preparing legislation that is similar to that approved in New Jersey.

New York

Municipal Utility Sale OK'd

BY a vote of 871 to 680 the taxpayers of the village of Herkimer, New York, approved the sale of their municipal electric facilities to Niagara Mohawk Power Corporation. The Herkimer electric system has been municipally operated since 1891, generates its own power, and serves 4,000 customers. Those who opposed the sale had urged continued municipal operation, using the power of the St. Lawrence project. The determining factors that led voters to choose the Niagara Mohawk Company were standards of service and local taxes that would be paid by the company.

Herkimer is the second large municipal operation to switch to Niagara Mohawk service. Voters of Dunkirk authorized sale of the city's municipal electric system to Niagara Mohawk in December of 1957.

Oklahoma

Gas Test Withdrawal Asked

THE Oklahoma Natural Gas Company has asked that its case be withdrawn from the Supreme Court docket. The case involved the issue of whether the Federal Power Commission may approve a new pipeline project without first passing on the price to be paid for the supply of gas. The high court last fall granted an Oklahoma Natural Gas petition to review the issue. The FPC then approved the plan of the Natural Gas Pipeline Company to extend its lines to areas of southern Oklahoma and north Texas. The company had a contract to buy gas from fields in those areas for approximately 15 cents a thousand cubic feet. Oklahoma Gas was already buying gas in the area for about 11 cents. It intervened in the case and asked the FPC to approve the pipeline extension only on the condition that Natural's contract price be lowered. The FPC rejected the Oklahoma Natural Gas argument and approved the pipeline project.

The FPC's action was upheld in the court of appeals. Oklahoma, after winning the highest court's consent to review the case, said that while its petition was pending competitive conditions upped the price of gas higher than the 15 cents it previously protested paying, thus invalidating the rate issue in the case. In keeping with custom, the Supreme Court will doubtless grant the move for withdrawal of what could have been a major test case on gas pricing.

Pennsylvania

New All-electric Rate

A NEW, lower all-electric rate for customers with electric home heating has been put into effect by West Penn Power Company. Nearly 300 residential heating customers will benefit from the new rate immediately, and present expectations are that this number will be doubled within the next few months.

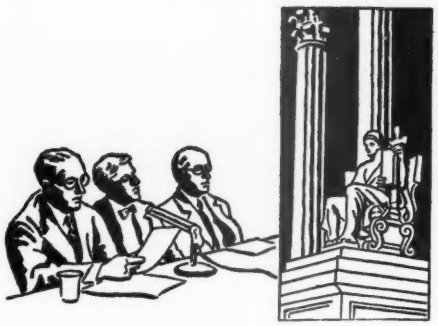
Under the new rate, West Penn's electric home-heating customers will be billed at 1.65 cents per kilowatt-hour for monthly use in excess of 500 kilowatt-hours. This rate is 17½ per cent lower than the former two cents per kilowatt-hour rate that applied to residential use at this level. The 500 kilowatt-hour figure is exclusive of controlled electric water-heating use, which is available to all residential customers at 1.15 cents per kilowatt-hour.

Washington

PUD Bond Issue Fee

IT was revealed in Olympia before a Washington legislative inquiry that the Chelan Public Utility District had paid a $920,000 fee for sale of a $273.1 million bond issue. A Seattle investment firm's witness told about the fee while the committee was investigating the financial practices of the state Toll Bridge Authority. Apparently the testimony was made for the purposes of comparison between toll bridge financing and public utility district financing.

The fee was reported to have been paid to a New York organization in non-interest-bearing bonds to be paid over a period of twenty years. The bond issue, sold in December, 1957, was for the construction of the Rocky Reach dam.



Progress of Regulation

Trends and Topics

Managerial Discretion in Selecting Depreciation Method for Income Tax Purposes

UNDER § 167(a) of the Internal Revenue Code of 1954 a taxpayer may compute its depreciation allowance by use of any one of three specific methods—straight line, declining balance, sum of the years—or any other consistent method. Several rate decisions have involved the question of allowing as a deduction the actual tax paid or a higher tax which would be paid if a company had not used accelerated depreciation for tax purposes.

The impact of rapid depreciation on tax deductions for rate making is discussed in PUBLIC UTILITIES FORTNIGHTLY, May 9, 1957, at page 705. Another question is presented when a company has not used rapid depreciation, or has reverted to straight-line depreciation because a commission denies, as a deduction for rate making, the amount of tax saved.

In an Ohio case the right of a company to make its decision on use of accelerated depreciation seems to have been recognized, although that specific question was not involved. The Ohio commission allowed the Ohio Fuel Gas Company to have the tax normalized, computed by the use of the straight-line method of depreciation, despite the fact that the company had elected to pay its tax on an accelerated basis. The commission said that if taxes were not normalized in rate proceedings "utilities would not elect to use an accelerated depreciation method to determine income taxes" (25 PUR3d 207).

Maine Commission Rules against Company Choice

This question arose in Maine as the result of commission and court rulings that only the current income tax is allowable in fixing rates for a company using accelerated depreciation and that there should be no "normalization" charge for income tax deferred (17 PUR3d 452; 21 PUR3d 321).

The Bangor Hydro-Electric Company, because of this policy, converted its depreciation for income tax purposes to the straight-line basis. The Maine commission conceded that, unless a company has abused its discretion, expenses incurred in rendition of service are primarily a matter of managerial discretion,

but the commission said that rate regulation cannot be frustrated by the imposition of extravagant or unnecessary costs on ratepayers. The commission decided that the company's failure to use accelerated depreciation constituted an abuse of discretion, and a proposed rate increase was disapproved.

Commissioner Allen, in a dissenting opinion, said he did not believe the commission had the right to force upon the company a choice of options which the Internal Revenue Code apparently left for the discretion of the taxpayers. He did not believe his position to be in conflict with the decision in the Central Maine Power Company case because in that case the commission was not presented with the question concerning the initial election of tax depreciation methods, but rather with proper rate treatment after such election had been made (Re Bangor Hydro-Electric Co., reviewed in PUBLIC UTILITIES FORTNIGHTLY, February 12, 1959, at page 275).

Pennsylvania Upholds Company Choice

The Pennsylvania commission and the state courts have consistently adhered to the rule that income taxes actually paid should be allowed as a deduction for rate making. If a company uses accelerated depreciation for tax purposes, it is allowed only the lower resulting tax. If it does not use accelerated depreciation in computing income taxes, it is allowed the higher resulting tax (17 PUR3d 249; 17 PUR3d 330; 25 PUR3d 273). It is said that the taxpayer has the option to use either one of the alternate methods permitted under the tax law.

The Pennsylvania commission, in the Peoples Natural Gas Company case, said it has been recognized generally that a commission may not substitute its judgment for managerial judgment unless there has been an abuse of discretion. The commission concluded that it should make no adjustment of tax expenses because of a company's decision not to use accelerated depreciation for income tax purposes (17 PUR3d 330). The superior court has pointed out that the accelerated methods provide a greater deduction in the early years of the life of the property than the straight-line method, but a lesser deduction in later years (17 PUR3d 249).

The Pennsylvania superior court, upholding a commission rate order, recently said that the actual income tax paid to the federal government is one of the costs of service, and the decision to use any permissible method of determining depreciation in filing the tax return is largely a matter for managerial discretion. The commission, according to the court, properly allowed the company to claim a deduction for actual income taxes paid on the basis of straight-line depreciation, though the company could have taken accelerated depreciation which would have resulted in a smaller tax. This was held to be true even though the company had reverted to straight-line depreciation because it had been denied the benefits of accelerated depreciation when previously used (25 PUR3d 273).

Review of Current Cases

Uniform System-wide Rates Justified and Rulings Made On Depreciation, Taxes, and Discrimination

THE Wyoming commission, in granting an electric company a rate increase which would produce a return of 5.66 per cent on a depreciated original cost rate base, held that the use of uniform system-wide rates as proposed by the company was justified.

The electric company operated in both South Dakota and Wyoming, and maintained that plant investment was designed to provide joint service to customers in both states.

The facts clearly demonstrated that company properties were intimately interwoven for a common purpose. Also, it would be difficult and expensive to segregate in relation to the service furnished in each jurisdiction and to allocate the cost of operations. Another factor which militated in favor of Wyoming consumers, pointed out the commission, was the greater population density in areas served in South Dakota.

Depreciation

Instead of depreciating properties on a straight-line basis, the company arrived at its annual depreciation requirement by taking 16½ per cent of gross revenues minus maintenance expense. The commission thought that the real question for consideration was not whether the formula used was improper, but whether the use produced an unreasonable result. According to expert testimony, the company's depreciation reserve was adequate and the method used produced substantially the same results as those obtained through the use of the straight-line method. The commission found the company's method acceptable.

Tax Accounting

The accounting procedure followed by the company with respect to income tax deferrals created by the use of accelerated depreciation under § 167 of the Internal Revenue Code of 1954 had been attacked by the protestants. A utility is entitled to normalize income taxes when using accelerated depreciation for income tax purposes, pointed out the commission. Tax deferrals are not a savings to the utility but a liability. The company's accounting system followed this ruling and the commission could see no reason why it should be disturbed.

Industrial Rates

Industrial customers had objected to the higher industrial contract rate schedule presented by the company. Citing present rates fixed by contracts which contained no escape clauses, protestants contended that the commission did not have authority to reform contracts by abrogating the rate schedules therein set forth and substituting others.

The commission did not agree. The commission has authority to nullify and abrogate contract rates, provided it finds them to be inadequate or unremunerative, unjust, unreasonable, unjustly discriminatory, or unduly preferential and contrary to the public welfare. Upon such a finding, the commission may substitute what it determined to be just and reasonable rates.

Discrimination

The commission, however, took exception to the company's proposal to spread approximately 70 per cent of the overall rate increase among bentonite processors.

The company is not justified in singling out one industry, said the commission, and imposing upon it such a large proportion of its rate increase. Such treatment discriminates against the industry and requires it to pay the company more than its fair share for electric service. The company was directed to redesign its industrial tariff. *Re Black Hills Power & Light Co. Docket No. 9339, January 5, 1959.*

Authorization of Telephone Rate Increase Involves Stipulation by Parties As to Revenue Needs

THE Ohio commission approved a rate increase for The Ohio Bell Telephone Company sufficient to provide additional intrastate revenues of $16,750,000. This additional income will result in a rate of return of 6.16 per cent, based on a reproduction cost new less depreciation rate base.

Originally, the company sought a $28,364,000 increase but later stipulated with a number of intervening cities, recommending the lower figure. The commission noted, of course, that the stipulation did not negate its duty in the proceeding to make findings from the evidence, on which to base its order.

Property Sampling Approved

The use of sampling plans shown to be scientifically designed is sound and proper for employment both in the verification of most primary property accounts and in the determination of the observable causes of depreciation for most of the depreciable property accounts, the commission indicated. Inspection of less than all of a utility's property results in great savings of time, money, and effort to ratepayers, utilities, and the commission. Sampling procedure accords with accepted modern technical and business practice, it was noted.

In arriving at the reproduction cost new less depreciation rate base, the commission accepted the staff's calculation of existing depreciation of 21 per cent instead of the company's proposed 14 per cent. Actual operating results for 1957 and station level as of the middle of the year were used in determining the revenue effect of the rates proposed by Ohio Bell.

Rate Schedule Design

The commission observed that the design of rate schedules is necessarily subject, in part, to the prerogatives of management. However, in instances where additional revenue is warranted but exceptionally wide deviation in per cent increases is proposed in rate schedules within a classification from the average percentage increase in the other principal classifications, the commission may require appropriate adjustments unless there is a showing that such deviation is reasonable.

It was objected by interveners that some rates for residential classifications were increased more percentagewise under the proposed schedules than the rates for business classifications. The objection could not be sustained since it appeared that the cumulative percentage increase to business classifications in the postwar period had been greater than the increase applicable to residential service. The proposed revision would tend to narrow the percentage differential. An adjustment was ordered, however, to certain measured rates for residential service which had been increased percentagewise substantially more than flat rates. *Re The Ohio Bell Teleph. Co. No. 27,400, December 29, 1958.*

Escalated Producer Rate Held Effective As of June 7, 1954

THE U. S. court of appeals reversed a Federal Power Commission order which denied a notion of Kerr-McGee Oil Industries, Inc., a natural gas producer, for commission recognition of an escalated rate claimed to have been the legally effective rate on June 7, 1954.

Under a contract between the producer and a buyer, it was agreed that the producer's prices should be increased in a certain ratio to any general increase that the commission might approve for a gas company which purchased gas from the producer's buyer. Upon a substantial increase in the gas company's rates retroactive to a time prior to June 7, 1954, the producer sought recognition of a proportionate increase in its own rates as of that date. The commission contended that by failing to bill and charge the escalated rate until after final adjudication, the producer lost whatever right it possessed to assert the increased rate as of June 7, 1954.

Billing and Charging Not Crucial

It is now established beyond doubt, said the court, that the legally effective rate on June 7, 1954, is not necessarily the rate being billed and charged on that date; nor is it the billing and charging which control the effective rate. Rather, the effective rate on the critical date is one which has accrued by force of the contract as of that date by virtue of the then existing operative facts, whether charged, billed, or legally determined. The correct and effective sale price, the court pointed out, is the price which the producer was entitled to receive, and the buyer obligated to pay, under the terms of their contract. When the gas company's rate increase was ultimately approved retroactively, the producer thereupon became entitled to charge, and the buyer to pay, the increased rate under the contract.

The commission also argued that the escalation had not accrued as of June 7, 1954, because the contract was so ambiguous as to require negotiations after the critical date to determine the escalated sales price. The meaning of "general increase," as provided in the contract, was said to be doubtful.

The court thought, however, that there was no room for negotiation under the contract. The parties treated it as unambiguously self-executing, as the commission had inferentially conceded. This is the crucial consideration, said the court, for even if a dispute had arisen concerning the meaning of the term "general increase," its ultimate resolution would have related back and become effective before June 7, 1954. The escalated rate was held to be the legally effective rate on the critical date. *Kerr-McGee Oil Industries, Inc. v. Federal Power Commission, 260 F2d 602.*

Parent Company's Additional Income Tax Expense Held Cost of Service in Subsidiary's Rates

A U. S. court of appeals ruled that additional income tax expense incurred by a parent company in financing a subsidiary electric generating company was a proper cost of service in the subsidiary's rates. On this point the court stayed an order of the Federal Power Commission (23 PUR3d 499) and remanded the case for further proceedings.

In order to provide relatively cheap

power to the du Pont Company, South Carolina Electric & Gas Company formed a subsidiary, South Carolina Generating Company, and financed it with 90 per cent debt, purchasing the 10 per cent equity itself. However, in order to maintain its financial standing on a consolidated basis and market the system's securities, the parent was compelled to increase its own common equity by issuing additional common stock. This resulted in an increase in the parent's income taxes, which it contended, without success before the commission, should be taken into consideration in determining the level of rates which the generating company may charge Georgia Power Company for excess production sold to that company. The commission, in striking down a contract rate to Georgia Power, had held that the allowance for income taxes should not exceed the taxes chargeable to the subsidiary alone and paid by it as a separate entity.

Tax Expense and Rate of Return

The court was unable to square the commission's position on this point with its use of the system-wide capital structure in fixing a reasonable rate of return for the generating company. In determining such return, the commission had found that it was essential to recognize that although the subsidiary was legally a separate entity, it was financed and operated by a system which for practical purposes should be considered as a single entity.

The commission argued that the controlling purpose of South Carolina Electric in financing the generating plant was to improve its own financial standing, broaden its own market, and protect its territory. The commission thought the extra tax costs incurred by the parent were for its own benefit and could not be considered a part of the costs of service to the generating company. It was contended that the benefit of the low costs which were given to du Pont were denied to Georgia Power, and hence the extra costs should not be considered in determining the price which Georgia Power should pay.

Undoubtedly, said the court, South Carolina Electric undertook the risks of the new enterprise in order to improve its financial standing and broaden its market, but this would not relieve Georgia Power from its obligation to pay a reasonable price based on the costs of production, including income taxes. All of the interested parties, it appeared, benefited from the success of the venture. The additional income tax, the court held, was an unavoidable consequence of the service, and whether South Carolina Electric elected to incur that cost directly or indirectly through its wholly owned subsidiary, the relation to the total cost of service was the same.

It should be borne in mind that the increased tax cost would be spread over the entire South Carolina Electric system and that Georgia Power would bear only a proportionate share of such cost, the court pointed out. *South Carolina Generating Co. v. Federal Power Commission et al. No. 7445, December 19, 1958.*

Rehearing Denied on Reversal of Certificate Grant to Rival Applicant

THE Indiana supreme court denied a petition for rehearing of its earlier judgment (24 PUR3d 410) which overturned a commission decision (13 PUR3d 435) granting a certificate of territorial authority to a telephone co-operative and denying a certificate to a rival telephone company. The territory involved in this

case had been declared open territory by the commission because of the inadequacy of service being furnished by another utility. The high court of the state held in its original judgment that the commission's grant to the co-operative was not supported by findings. Evidence of the company's ability and responsibility had been disregarded in favor of the rather questionable ability of the co-operative to provide adequate service.

On the petition for rehearing, it appeared, contrary to the court's assumption in its original decision, that no territorial certificate had ever been issued to the utility whose service had become inadequate and whose territory had, therefore, been declared open. The court pointed out that the commission has no authority to issue a territorial certificate upon a voluntary report for an area already being served by a utility. *General Teleph. Co. of Indiana, Inc. v. Indiana Pub. Service Commission et al. 154 NE2d 372.*

Economics Outweighs Applicants' Choice Of Telephone Exchange

THREE individual complainants failed to persuade the Illinois commission to direct DeKalb-Ogle Telephone Company to extend its lines a distance of about 10 miles to their residences. Although this company's exchange was located in the community center of the complainants' social and business interests, it appeared that another company, Farmers Telephone Company, having an exchange three miles nearer, could provide service more economically. Neither company had held itself out to serve the area in which the complainants live, but Farmers Telephone was willing and able to furnish the needed service. DeKalb-Ogle Telephone was not willing. Both companies would extend lines to new subscribers on same terms.

The commission observed that the furnishing of service in such a situation as this entails considerations of an economic, engineering, and legal nature as well as consideration of public convenience and necessity. It found that Farmers Telephone could more feasibly and economically furnish service to the complainants and, therefore, dismissed the complaint without prejudice. *Biggers et al. v. DeKalb-Ogle Teleph. Co. No. 45330, December 16, 1958.*

Base Rate Area Discrimination

THE North Carolina commission authorized a telephone company to extend base rate areas for certain exchanges and to reclassify certain exchanges into rate groups. Base rate areas for telephone service, pointed out the commission, instead of following municipal limits, should extend to embrace fringe areas in which there is a considerable density of population using the service.

In its investigation, the commission found that there were many built-up and concentrated areas on the fringe of, or adjacent to, existing base rate areas and that discrimination existed between the telephone subscribers in the built-up fringe areas and those subscribers within the base rate areas.

As to grouping of telephone exchanges in a state, the commission said, according to the number of telephones being served by a particular exchange, classification of exchanges according to the number of stations in each exchange of a statewide com-

pany avoids the statutory prohibition of discrimination where the division lines are well defined between each gradation, since the value of service increases as the number of stations in the exchange increases. *Re Southern Bell Teleph. & Teleg. Co. Docket No. P-55, Sub 193, January 21, 1959.*

Competition Authorized in Disputed Area

THE Indiana commission authorized a telephone company to extend service into an area presently served by a co-operative. The commission based its decision upon community interests, convenience to the public, financial effects upon both the co-operative and the company, investment in the disputed area by both, and the charges for service.

The evidence showed that the commission had granted a certificate to the co-operative, which covered the disputed area. Later, the president of the co-operative had signed a map tendered by the company, which established a portion of the disputed area as the company's territory.

Subsequently, the company began to render service to industrial plants newly established in the territory. The co-operative had no telephone facilities in the area until after the company commenced rendering service.

The commission pointed out that if the co-operative were allowed to serve the disputed area exclusively, a telephone call between the communities of interest would require a circuity of routing through three different exchanges and a toll charge. There were not more than 115 establishments in the area, and the co-operative was presently serving 13 and the company six.

The co-operative had constructed facilities at a cost of approximately $65,000, most of it while the dispute was in litigation. The company had constructed facilities at a cost of approximately $42,000. *Re Indiana Teleph. Corp. Cause Nos. 25590, 25899, November 13, 1958.*

Fair Value Rate Base for Gas Company

THE Illinois commission authorized increased rates which would produce a return of 6 per cent on a fair value rate base.

To determine the fair value, the commission pointed out that it was required to give reasonable consideration to reproduction cost, properly depreciated, as well as original cost less the reserve for depreciation. In addition, the commission authorized a cash working capital and materials and supplies allowance. *Re United Cities Gas Co. Nos. 45210, 45231, January 21, 1959.*

Fair Value Rate Base for Water Company

THE Illinois commission authorized a water company to increase rates so as to produce a return of 5.54 per cent on a fair value rate base. In arriving at fair value, the commission noted, it is required to take into account current economic conditions, price levels, and reproduction cost, as well as the original cost of construction, the amount expended in permanent improvements, and the probable earning

capacity of the property under the rates prescribed.

However, the weight to be given these various elements of value must of necessity be determined on the basis of reasonable judgment.

An allowance for depreciation at the rate of 1.5 per cent of the original cost of depreciable plant was authorized. Regulatory expense was required to be amortized over a five-year period. Contributions in aid of construction were excluded. An allowance for cash working capital and materials and supplies was authorized. *Re Northern Illinois Water Corp. No. 45273, January 21, 1959.*

Use of Plastic Pipe for Gas Distribution A Matter for Managerial Discretion

THE Florida commission declined to adopt a rule either approving or disapproving the use of plastic pipe by gas utilities for the distribution of natural gas to customers. It found that the use of such pipe is a matter for decision by management in the exercise of its own good judgment.

The commission authorized gas companies in Florida, as a prerogative of management, to use plastic pipe, subject, however, to the requirement that they strictly adhere to the recommendations of the subcommittee of the American Gas Association on plastic pipe standards (Report DMC-56-16 and any subsequent report). A further requirement was imposed that gas utilities should strictly adhere to reasonable safety standards and practice in the installation and use of such pipe.

Although the evidence indicated that plastic pipe has been used for several years in a number of other states in the distribution of natural gas, the commission was not aware that any commission or recognized authority on standards had ever affirmatively approved the use of such pipe. *Re Rule on Use of Plastic Pipe by Gas Utilities, Docket No. 5577-Rule, Order No. 2716, January 7, 1959.*

"Lease" and "Employment" Trucking Operation Held Subterfuge

ANY scheme, whether by purported lease, agency, or other device disguising the true nature of motor carrier transportation, will be of no avail for the purpose of evading regulation, a Florida court of appeals ruled. "Motor carrier operations must be bona fide and conducted in good faith without a shadow of subterfuge or attempted evasion of the letter or obligation of the law," it was said. The court reversed a circuit court order of discharge on a habeas corpus hearing against an uncertificated truck driver who transported goods for his ostensible employer-shipper in a truck purportedly leased to the shipper.

This transportation arrangement involved three different entities working in an integrated system. A shipper would contact a traffic advisers' service which would, in turn, arrange for a driver from an independent drivers' association to pick up a truck from a company purporting to lease trucks. Driver and truck would then proceed to the shipper's place of business to pick up merchandise and, after having the shipper sign a written lease, would proceed to the point of destination as

specified in the lease. Upon delivery of the goods, the traffic advisers' service would receive checks totaling the exact amount of the carriage, though broken down so as to pay a specific amount for the driver's wages.

The driver contended that he was an employee of the shipper and not required to operate under a certificate of public convenience and necessity. The lower court sustained this contention. The appellate court held, however, that the "employment" and "lease" were mere form and that the subterfuge was patent. While the shipper did pay for the driver's services, the payment came from what the court regarded as "a sum that can be designated as freight or payment for transportation of goods."

The shipper would send separate checks to the traffic advisers' service, and the driver would actually receive his money from the latter. The court found no such control by the shipper over the driver as would indicate a relationship of employment. *Florida ex rel. Florida R. & Pub. Utilities Commission et al. v. Ingalls, 106 So2d 570.*

Commission Lacks Jurisdiction Pending Return of Case from Appellate Court

THE Florida commission denied a motion by Southeastern Telephone Company for an immediate decision in its current rate case, following a recent hearing before the commission. Upon the commission's prior order in this case revoking a temporary increase in rates, the company obtained an injunction against the revocation order. The state court of appeals, in turn, reversed the lower court (26 PUR3d 417), but the time in which the company may appeal from this decision has not yet expired.

Since the controversy has not been returned to the commission, the commission held that it had no jurisdiction to grant the requested relief.

In reply to an assertion by the company that it would not be able to finance needed improvements and expansions in the absence of an immediate order granting adequate rates, the commission observed that the company's failure promptly to have sought review of the court decision, if it intended to seek such review, did not square with the urgency being urged. The commission took the position that the company must bear the responsibility for delay in obtaining a rate order since it controlled the time when the commission's jurisdiction would be reinstated. *Re Southeastern Teleph. Co. Docket No. 5364-TP, Order No. 2717, January 8, 1959.*

Rate Increase Contingent upon Plant Repairs

THE Wisconsin commission granted an application by Norwalk Independent Telephone Company for a substantial rate increase but made the authorization contingent upon the company's expending for repairs during the current year approximately four times the pro forma net revenues.

The new rates will provide a rate of return of 6.4 per cent on a net book value rate base.

Due to its low rate structure the company has followed a policy of minimum maintenance even though its plant has been aging and wearing out. It proposed to use the additional revenues to step up

its maintenance program and generally to improve the system. It serves a total of 326 subscribers from a magneto switchboard in Norwalk.

Business and Residence Service

A proposed net rate of $3.60 for one-party business was required to be increased to $3.80, and a proposed one-party residence net rate of $2.85 was ordered reduced to $2.80, in order to provide a reasonable differential between the two classes of service. A proposal to increase the rural rate for grounded service was considered unreasonable because there were only eight subscribers on one circuit remaining in such service, which would soon be metallized. *Re Norwalk Independent Teleph. Co. 2-U-5103, January 19, 1959.*

Belated Request for Review of Certificate Order Denied

THE Florida supreme court dismissed a petition for certiorari to review a commission order denying reopening of a proceeding for the purpose of reconsidering the propriety of a certificate order issued in the proceeding. While the petition for certiorari was nominally addressed to the order denying reopening and was filed within sixty days of such order, it was in reality directed to the order which granted the certificate—an order issued more than eight months before the petition was presented to the court.

Applicable statutes and rules require such petition to be filed within sixty days after the entry of the order appealed from. Even if it be conceded, arguendo, said the court, that the petition to reopen was properly filed under the commission's rules, nevertheless, it would not operate to stay the time within which certiorari should be taken.

The court, thus, declined jurisdiction even though the jurisdictional question was not raised by any of the parties. Mere consent of the parties to confer jurisdiction on the court, if their failure to raise the question may be so construed, is impotent to accomplish that result, the court commented. *Central Truck Lines, Inc. et al. v. Boyd et al. 106 So2d 547.*

Smoking Permitted on Intercity Buses

THE California commission ruled that cigarette smoking should be permitted in the rear seats of intercity buses, though no smoking should be allowed on urban buses. The reasons for this ruling hinge on air conditioning and competition.

Modern intercity buses are equipped with effective air-conditioning systems which reduce or eliminate the discomfort resulting from odors and impurities in the air. Only on buses having such air-conditioning systems will smoking be permitted. Smoking of cigars and pipes, however, is still not permitted because of their stronger and more noxious odors.

It was pointed out that airlines and passenger trains permit cigarette smoking. In order to meet this competitive condition, the commission thought intercity buses should permit it also. Only limited competition in this respect exists in urban transportation. *Re General Order No. 98, Decision No. 57770, Case No. 5098, December 30, 1958.*

Limitations on Use of Commission's Natural Gas Conservation Fund

IN an action brought by Panhandle Eastern Pipe Line Company the supreme court of Kansas held that a statute directing the state treasurer to credit 20 per cent of all costs collected by the commission, pursuant to certain regulatory statutes, to the state's general fund was unconstitutional. The statute also directed the treasurer to transfer $100,000 from the unexpended balance in the natural gas conservation fund of the state commission to the state's general revenue fund.

The court conceded that, under its police power, the state may reimburse itself for costs of otherwise valid regulation and supervision by charging the necessary expenses to the businesses or persons regulated. It pointed out that a statute is void, however, if it shows on its face that some part of the exaction is to be used for a purpose other than the legitimate one of supervision and regulation, or if more than adequate remuneration is secured.

Where interstate commerce is involved under a statute which shows that expenses other than those of legitimate regulation are defrayed from assessments levied on the regulated businesses or that the exaction obtained under the statute exceeds the regulation expenses to the extent that good faith of the statute is impugned, it cannot stand under the commerce clause or the Fourteenth Amendment of the federal Constitution, according to the court.

The court held that when a regulatory measure openly becomes a revenue enactment, that portion which exacts revenue fails as a valid exercise of the police power. In this case, the court concluded that the statute amounted to a tax and a revenue measure levied under the guise of a regulatory fee, and therefore violated the state Constitution, the commerce clause, and the Fourteenth Amendment of the federal Constitution. *Panhandle Eastern Pipe Line Co. v. Fadely et al. 332 P2d 568.*

Transportation to and from Race Track

THE New York supreme court held that the commission had properly granted the operator of a limousine service a permit as a contract carrier rather than as an omnibus carrier. The commission must be given a reasonable latitude, said the court, since it has been delegated the task of classifying motor carriers of passengers for hire into omnibus lines and contract carriers under broad statutory language.

The operator had three 7-passenger limousines, which were not marked or identified as vehicles for hire. They were operated during the horse-racing season between a terminal in New York city and various tracks in the metropolitan area. Customers, by appointment, were either present at the terminal or at a designated location to be picked up at approximately the same time each race day. Routes were governed by the location of passengers, and only customers who had been conveyed to the track or who had made reservations for the return trip were taken on the return trip. *Recreation Lines, Inc. v. New York Pub. Service Commission, 179 NYS2d 1001.*

Other Recent Rulings

Telephone Company Return. The Illinois commission considered a return of 3.6 per cent on a telephone company's net book value rate base reasonable. *Re Odin Teleph. Exchange, Inc. No. 45411, December 2, 1958.*

Supply Cost Drives up Retail Rates. Citizens Gas Company of Hannibal obtained a rate increase from the Missouri commission mainly to cover an interim supply rate increase put into effect subject to final determination by federal authority; but the new retail rates, calculated to yield a 7 per cent rate of return on net original cost, were made subject to the company's duty to refund to retail customers any refund received from the supplier. *Re Citizens Gas Co. of Hannibal, Case No. 14063, December 12, 1958.*

Water Surcharge. In approving a general rate increase for a water utility, the Wisconsin commission authorized a surcharge of 25 per cent above urban rates to be applied to suburban customers in view of the greater cost of service to suburban property and because suburban users paid no public fire protection charge for inherent fire protection supplied. *Re City of Evansville, 2-U-5076, December 12, 1958.*

Water Company Return. The Pennsylvania commission did not consider a return of 4.91 per cent on a water company's fair value rate base excessive or unreasonable. *Pennsylvania Pub. Utility Commission v. Elizabethville Water Co. C. 16947, C. 16932, December 15, 1958.*

Property Used and Useful. Property which is not used and useful for public utility service cannot be considered a part of the rate base, the New Mexico commission pointed out in rejecting an argument that an application for authority to acquire and operate utility facilities should be denied on the ground that the possible termination of service contracts might result in the abandonment of the facilities and an undue burden upon ratepayers. *Re Public Service Co. of New Mexico, Case No. 524, December 16, 1958.*

Return Not Excessive. The Missouri commission did not consider a return of approximately 4 per cent on a water company's net original cost rate base excessive. *Re Consolidated Water Corp. Case No. 13938, December 18, 1958.*

Financial Qualifications. The U. S. court of appeals held that the FCC's grant of a television permit was error where the finding of financial qualifications did not accord with evidence that the applicant had impaired capital and that one of its stockholders had orally agreed to lend funds repayable within two years. *WLOX Broadcasting Co. v. Federal Communications Commission et al. 260 F2d 712.*

Religious Orientation. The U. S. court of appeals held that the religious orientation of a television permit applicant is irrelevant in a comparative hearing as long as fair broadcast treatment will be given to others who do not share the applicant's convictions and as long as the other broadcast needs of the community will be met. *Noe et al. (James A. Noe & Co.) v. Federal Communications Commission et al. 260 F2d 739.*

Switching Operation. The U. S. court of appeals held that movements not involving the use of main line tracks, accom-

plished by switching crews with the use of switch engines (under the direct control of the assistant general yardmaster who has radio contacts with all engines operated on the tracks) constitute switching operations, and not operation of a train within the air-brake provisions of the Safety Appliance Acts. *United States v. Terminal R. Asso. of St. Louis, 260 F2d 884.*

Res Judicata. The U. S. district court held that ICC findings in a case involving rates through a certain city for break-bulk traffic, in which loading and unloading and lighterage were essential elements, were not res judicata in a proceeding involving nonbreak-bulk traffic in which no lighterage, or floatage, or loading or unloading services were performed. *New York, S. & W. R. Co. v. Reading Co. 166 F Supp 646.*

Dissenters' Rights in Merger. In determining the reasonableness of a stock exchange ratio in a railroad merger case, the Interstate Commerce Commission observed that while merger terms must be reasonable to dissenting stockholders, such stockholders are not entitled to any premium by reason of their dissent, nor to special treatment or advantages because of an attempt to hold out against the merger. *Stott et al. v. United States et al. 166 F Supp 851.*

Stenographic Omission. The U. S. district court held that the ICC had not committed prejudicial error in failing to correct the record and reconsider a case involving railroad sulphur transportation rates on the basis of the corrected record after it discovered that a stenographer had failed to include a portion of the prepared statement read by a witness at the hearing before the examiner. *Columbia Transp. Co., Inc. et al. v. United States et al. 167 F Supp 5.*

Jurisdiction over Water Carriers. A federal district court held that a water carrier operation involving towage in addition to the carriage of three or less commodities in bulk was not exempt from regulation, notwithstanding a provision of the Interstate Commerce Act exempting the carriage alone of not more than three commodities in bulk. *Commercial Barge Lines, Inc. et al. v. United States et al. 166 F Supp 867.*

Supersedeas of Commission Order. The Alabama supreme court held that the circuit court does not have power to supersede or stay a commission order denying an abandonment application, pending final determination by the supreme court. *Ex Parte Alabama Pub. Service Commission, 106 So2d 158.*

Certificate Extension. The Kansas City court of appeals sustained a commission grant of a motor carrier's application for extension of service to include the transportation of petroleum products between certain points where the evidence supported commission findings that an objecting carrier was not equipped to render satisfactory service and would not lose business. *Missouri ex rel. Transport Delivery Co. v. Burton et al. 317 SW2d 661.*

Appeal Moot. The Pennsylvania superior court held that an appeal from a commission order directing a railroad to hold schedule changes pending investigation and public hearing had been rendered moot by another court determination that the commission is without authority to require application and approval by it prior to removal, elimination, or substantial change in a passenger train schedule.

Pennsylvania R. Co. v. Pennsylvania Pub. Utility Commission, 146 A2d 360.

Desire Not Enough. The Pennsylvania superior court held that neither the desire to perform additional service nor the shipper's desire to obtain the service is sufficient to warrant the granting of a motor carrier's application for authority to render additional services, in the absence of a showing of public convenience and necessity. *Motor Freight Express et al. v. Pennsylvania Pub. Utility Commission, 146 A2d 323.*

Fuel Clause. The California commission denied a gas and electric company's request for establishment of a gas fuel clause in new steam rates where the evidence did not indicate that the rates had to carry a fuel clause in order to meet the load and meet the competition of gas fuel. *Re Pacific Gas & E. Co. Decision No. 57658, Application No. 40126, December 2, 1958.*

Crossing Maintenance Cost. The Pennsylvania superior court held that the commission's power to determine and prescribe the manner and conditions of maintenance of a bridge at a railroad crossing was not restricted to original construction or correction of disrepair, but extended to future maintenance cost allocations. *Township of Scott v. Pennsylvania Pub. Utility Commission et al. 146 A2d 617.*

Phone Rate Increase. The Indiana commission granted a telephone company a rate increase, notwithstanding the use of a simple system of single entry bookkeeping which did not reflect capital assets because depreciation accounts were lacking, where it was apparent that the company could not operate profitably and maintain present equipment without the increase. *Re Falmouth Teleph. Co., Inc. Nos. 27907, 27908, December 5, 1958.*

Service Extension Denied. The Illinois commission denied a petitioner's request for service from a telephone company where the petitioners resided outside the company's territory and within an area served by a mutual. *Scott et al. v. Illinois Bell Teleph. Co. et al. No. 44545, December 2, 1958.*

Undue Preference. The Wisconsin commission held that water supplied by a municipal plant to municipal departments for park, drinking fountain, and street sprinkling should be paid for at the proper rate to avoid undue preference and advantage. *Re City of Brodhead, 2-U-5092, December 29, 1958.*

System-wide Profit. The Colorado commission, in granting a railroad's application for permission to discontinue a passenger train and consolidate it with another train, stated that the fact that the railroad, system-wide, had earned a profit during the past year was of little consequence where public convenience and necessity did not require continuance of the train. *Re Atchison, T. & S. F. R. Co. Application No. 16476, Decision No. 51400, December 17, 1958.*

Newly Certificated. The Wisconsin commission considered a return of 5.5 per cent on a newly certificated municipal water plant's rate base reasonable. *Re Village of Merrimac, CA-3677, December 23, 1958.*

Air-conditioning Rate. The Wisconsin commission approved a municipal water plant's request that a demand charge be imposed on unconserved water-cooled air-

conditioning installations. *Re City of Janesville, 2-U-5087, December 23, 1958.*

Air-conditioning Rate. The Wisconsin commission approved a municipal water plant's request for a separate rate for air-conditioning service, limited to use where the rate of flow exceeded 12 gallons an hour for each ton of cooling capacity. *Re City of Oshkosh, 2-U-5080, December 26, 1958.*

Low Return. The Wisconsin commission authorized a municipal water plant to increase rates which would produce a return of approximately 3 per cent on the rate base where, although the return was less than was usually considered necessary for a municipal water plant, the applicant had no indebtedness and preferred to operate on the lower rate of return. *Re City of Columbus, 2-U-5098, December 29, 1958.*

Municipal Plant Return. A return of 5.5 per cent on a municipal water plant's net book value rate base was considered reasonable by the Wisconsin commission. *Re Village of Fredonia, 2-U-5104, December 29, 1958.*

Sewer Plant Return. The Wisconsin commisson considered a return of 5 per cent on the sewer portion of a municipal water plant's net book value rate base sufficient, when added to the 4 per cent return on water plant, to meet debt service requirements on revenue bonds. *Re Village of Wrightstown, 2-U-5108, December 30, 1958.*

Passenger Train Discontinuance. The Florida commission granted a railroad's application for authority to discontinue two passenger trains upon a showing that the passenger service was not used or needed by the public and that needed freight express service would be adequately provided by substitute motor service. *Re Atlantic Coast Line R. Co. Docket No. 5403-RR, Order No. 2714, January 2, 1959.*

Attrition Considered. The California commission authorized a telephone company to increase rates to yield an initial return of approximately 7.2 per cent, so that a return of 6.5 per cent would be realized after a projected decline. *Re Roseville Teleph. Co. Decision No. 57814, Application No. 40177, January 6, 1959.*

Taxes Passed on. The Missouri commission directed that the amount of license taxes imposed upon a gas company in each community be passed on to consumers resident therein so that there would be no discrimination. *Re Missouri Nat. Gas Co. Case No. 14,080, January 6, 1959.*

Rate Case Expense. The Wisconsin commission directed that a telephone company amortize rate case expense over a five-year period instead of the three-year period requested. *Re Mt. Horeb Teleph. Co. 2-U-5056, January 9, 1959.*

Telephone Company Purchased. The Illinois commission authorized a telephone company to purchase the plant and properties of a mutual upon a showing that the mutual did not have the capital or technical knowledge to convert the system to dial and enlarge it to serve all potential users, that the company was willing and able to do so, and that the proposed service would benefit the public. *Re Illinois Bell Teleph. Co. No. 45547, January 21, 1959.*

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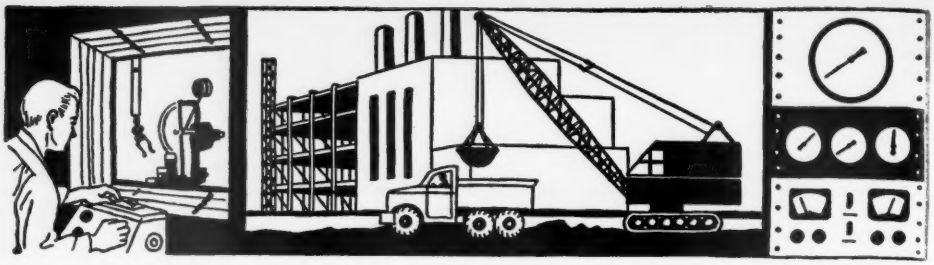
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Industrial Progress

Long Island Lighting to Spend $45,000,000 on Expansion

CONSTRUCTION expenditures totaling approximately $45,000,000 are expected to be made in 1959 by Long Island Lighting Company Mineola, Long Island, in the development of its electric and gas system, according to a statement made by John J. Tuohy, LILCO's president.

"We see 1959 as a year of continued industrial, commercial and residential growth for the area of Long Island which LILCO serves," Mr. Tuohy stated, "and we are backing this with a $45,000,000 construction program. Of this total $33,000,000 would be spent on electric production, transmission and distribution facilities; $8,000,000 on gas mains, services and meters; and $4,000,000 on common plant items such as our western Suffolk division headquarters now under construction at Brentwood in Suffolk County."

Mr. Tuohy disclosed that a major item in this year's capital expenditure is the electric generating unit of 185,000 kilowatt capability now under construction at Port Jefferson. "This fourth unit at this site," he said, "has reached the point where we are now starting to erect steel and we expect to have the unit operating and on the line in the fall of 1960. Transmission and distribution facilities represent the next largest item on our schedule and total $16,000,000.

Capital expenditures by Long Island Lighting Company in the ten years since 1948 have totaled $403 million.

$20,646,000 Program Planned By Southwestern Electric

SOUTHWESTERN Electric Power Company, Shreveport, La., plans to spend a record $20,646,000 on capital improvements in 1959, up sharply from the previous high of $15,904,734 in the year ended December 31, J. Robert Welsh, president, announced recently.

Major projects this year will include completion of a 114,000 kilowatt generating unit at Caddo Lake, La., to go into operation in April, start of construction of another 114,000 kw. unit in Shreveport, scheduled for completion in 1960, and purchase of a portable transformer for emergency service, Mr. Welsh reported.

Power System Transformers Underloaded, Studies Show

A NEW method for distribution transformer load estimating by means of electronic computer reveals that "considerable additional load" may be taken on many transformers in electric power systems without a "commensurate addition of capacity."

The Winter General Meeting of the American Institute of Electrical Engineers heard this recently in a paper presented by C. F. Mitchell and J. A. Hughes who reported on the use of the new method by their firm, the Commonwealth Edison Company of Chicago, Ill.

The study by Commonwealth Edison, the two men said, showed that "although changeout will seldom be justified . . . initial loadings on new installations (of transformers) can be increased by a substantial amount with confidence."

It was explained that the planned loading of distribution transformers is one of the more important economic problems affecting utility plant investment and that "present failure rates appear to indicate that the capabilities of transformers manufactured even 20 years ago are usually not fully utilized."

The economic studies of transformer loads, they said, employed the "Load Factor Method" which calls for computing loads from the custom KWHR consumption. While method itself is not new, having first investigated in 1951, it is being undertaken with the use of speed electronic data processing eq ment. The method thus applied, it stated, "has satisfied the need fo uniform mechanized method of Di bution Transformer load control."

"The initial results," the aut concluded, "have by statistical c parison been quite satisfactory. saving in engineering manpower become more apparent as the rat load growth . . . increases. The m significant fact which has been vealed is the proportion of unloa transformers."

Arizona Public Service Has P for $40,000,000 Expansion

EXPANSION plans calling for expenditure of nearly $40 mil during 1959 were announced rece by John M. Jacobs, chairman of board of directors for Arizona Pu Service Company, Phoenix, Ariz

Mr. Jacobs said that a total of $3 million will be spent for new po plants and electric and natural lines and facilities. "This is part five-year, $200 million construc program ending in 1962," said Jacobs.

"Every indicator that we use guide for future planning," Jacobs pointed out, "assures us the tremenodus growth of this s is sound, mature and orderly. We confident that this growth will tinue, and we intend to provide quate supplies of electricity and ural gas to pave the way for growth."

A large portion of this year's penditure, $16.7 million, will go continuing construction on the c pany's new Ocotillo power plant n

mpe. This 230,000 kilowatt plant be the state's largest steam elec- generating plant when it is com- ed in the Spring of 1960. Total of the plant is estimated at $30 lion.

Faciliti s for transmitting electric wer to distribution points will ac- nt for $4.4 million. New electric tribution facilities and improve- nts to existing ones will cost $11.5 lion.

Natural gas service facilities will be expanded. Gas main exten- ns, new gas services, main replace- nts and other improvements to ilities will account for more than 1 million.

The remainder of the total figure olves sundry expenditures to im- ve company property and equip- nt located and used throughout the ity's 10-county, 40,000 square mile a.

Pacific Lighting Announces $95,000,000 Program

ACIFIC Lighting Corporation, San ancisco, Calif., announces that its 59 construction budget is $95,000,- 0. Included in this, a 73-year record ount, is almost $39,000,000 for the nstruction of facilities to bring addi- nal gas from out of state to Southern lifornia. The construction is being dertaken by Pacific Lighting's three bsidiaries, Southern California Gas mpany, Southern Counties Gas mpany of California, and Pacific ghting Gas Supply Company.

At the end of the year, investment in nt properties exceeded $750 million.

orld's First Remote Controlled Gas Turbine Power Station

In Venezuela, Westinghouse Elec- c Corporation will build the first gas bine electric power station with mpletely automatic remote controls, cording to a recent announcement. Compa ia Shell de Venezuela will e it to power an oil storage and ker-loading facility on Lake aracaibo.

The sta ion consists of two 5000-kw bine-generator units, which will wer nine 1500-hp pumping motors. pacity of the installation will allow ndling initially 700,000 barrels ily and eventually well over one llion barrels per day. By using re- te controls, the same man can run turbine and the oil distribution stem from a single point.

To assure continuous operation, the turbines are designed to switch to diesel fuel should there be a failure in the gas supply.

Electronic Analysis of Power Piping Designs Presented in New M. W. Kellogg Brochure

A NEW brochure just published by The M. W. Kellogg Company, New York, a subsidiary of Pullman Incorporated, describes the latest computer methods of analyzing power piping designs. The 8-page brochure shows how Kellogg's power piping flexibility experts make recommendations based on computer results and experience. It explains how Kellogg engineers determine whether forces acting on equipment will meet supplier's guarantee requirements; whether stresses at various points are within allowable ASA Code ranges; and whether sufficient clearances are available for unrestrained pipe movements.

A chart included in "Piping Flexibility Analysis" graphically illustrates the steps taken by Kellogg's

(*Continued on page 22*)

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February 5, 1959.

computer in a five-phase comprehensive analysis of piping systems.

Two case histories are given and sample print-out forms trace the actual electronic computations made. A "before" and "after" print-out is given showing how a Kellogg recommendation reduced loading at the turbine.

For a copy of the new "Piping Flexibility Analysis," write The Fabricated Products Division, The M. W. Kellogg Company, 711 Third avenue, New York 17, N. Y.

Porter Announces New National Electric Division

H. K. PORTER Company, Inc. is continuing its expansion in the electrical equipment industry with the announcement recently by T. M. Evans, Chairman, of the acquisition of the business of National Electric Products Corporation, Ambridge, Pa.

The new National Electric Division of Porter will continue to manufacture and market the well-known product lines of rigid, thin-wall and flexible steel conduit, boxes and fittings, building wires and cables and high voltage cables, and under-floor raceway systems made and sold in the past by National Electric Products Corporation.

The new Porter division is headed by Robert F. Bennett, Jr. as general manager. In this capacity he will report directly to E. H. Mann, vice president of H. K. Porter Company, Inc. Vincent P. Oatis, Jr. has been appointed sales manager.

Ohio Edison to Spend $60,000,000 in 1959

OHIO Edison Company plans to spend about $60 million on new construction during 1959, down from $67.7 million in 1958, according to Walter H. Sammis, president.

Major items in this year's construction program are $25,285,000 for steam production facilities, $16,500,000 for transmission lines and substations and $14,895,000 for distribution lines and substations.

Over the next four years the company plans to install 680,000 kilowatts of new generating capacity at its new plant at Stratton, Ohio, on the Ohio river. This will be in four units of 170,000 kilowatts each. The first unit is expected to go into service in the summer of this year. Units two, three, and four are slated to go into service in the summers of 1960, 1961 and 1962 respectively.

New "Shelter-clad" Switchgear Facilitates Bad Weather Inspections

SHELTER-CLAD switchgear, designed to facilitate preventive maintenance of outdoor units during inclement weather, has been introduced by Allis-Chalmers.

The switchgear has a sturdy, weather-protected housing with a 75-inch wide aisle which affords protection in all kinds of weather for inspection or on-the-spot maintenance.

According to the announcement, this completely weather-proof work area on a sturdy steel plate floor with built-in, non-sag feature makes it possible to check the breakers without exposure to weather and the need for a transfer truck. The area, with light switch and utility outlet adiacent to doors at either end of the unit as well as a light fixture over each breaker, provides control room atmosphere.

The trunnion mounted potential transformers can be placed over the breaker unit in the superstructure for ease of inspection and aisleway accessibility or they can be placed in an auxiliary cubicle when such is provided. Maximum accessibility of component equipment is possible from the aisleway.

Current transformers are located in the breaker compartment directly behind a removable metal barrier and in front of the automatic primary disconnect shutters. This is an exclusive feature which provides maximum safety and accessibility during testing or replacing of current transformers from the protected aisleway.

Huge, Undeveloped Potential for Electric Power In Farm Production Equipment

THERE is a "huge," "as yet undeveloped" potential for the use of electric power in the operation of farm production equipment, the Winter General Meeting of the American Institute of Electrical Engineers was told recently.

Presenting a paper on "Rural Distribution Transformer Loading" Thomas R. McDonald, Dean B. Price and Harry W. Thiesfield of the Rural Electrification Administration, U. S. Department of Agriculture said:

"At the present time approximately 80 per cent of the (electric power) load (in rural areas) is in the f house and 20 per cent is used by duction equipment outside the ho hold. Production equipme t incl milking machines, welders grain vators, heat lamps and other s equipment. The ratio of f rm h to farm production equ ment changing as more electrical quipm is used in production of f rm p ucts. There is a huge po ntial such equipment as yet und velop

The composite trends of ll cla of rural consumers, includi g, bes farms, schools, small c mmer rural residential and occas nal l commercial consumer, sho s a bling of electric power lo I fro to 10 years. The farm lo d gro in itself, the three men said, has increasing at an even faste rate

Kuhlman Issues Catalog o Substation Transformers

KUHLMAN Electric Company, mingham, Michigan, has publish new bulletin on Kuhlman Substa Transformers. It covers single three phase transformers up to including 10,000 KVA, through KV.

The illustrated bulletin details struction features, standard ac sories and optional accessories of units.

For a copy of the new, 8-page bo let CS-701, write Kuhlman Elec Company, Birmingham, Michigan

Southwestern Eng. Issues N Catalog on Feedwater Heat

SOUTHWESTERN Engineer Company, Los Angeles, has nounced the publication of a new c log describing its feedwater heat

The heaters, which are utilized power plants in the exacting trans of heat from bleed steam to fe water, are custom engineered fabricated by SWECO.

Of interest is the catalog's descr tion of SWECO's exclusive s welded channel closure for high pr sure heaters. This closure accord to Southwestern Engineering Co pany engineers, allows for high pr sure operation with maximum r ability. Through use of the bre block principle and the pre-stress seal-welding, bolts and gaskets eliminated.

A cross section drawing in the ca log depicts the various parts of feedwater heater.

Copies of the feedwater heater ca

are available upon request from Southwestern Engineering Company, Dept. M-32, 4800 Santa Fe Avenue, Los Angeles 58, California.

New 3M Catalog Presents Complete Line of Insulating Products For Splicing and Terminating Wires

NEW 24-page catalog, believed to be the most complete single-source reference of insulating products for splicing and terminating wires and cables, was announced recently by Minnesota Mining and Manufacturing Co. (3M), Dept. D9-37, 900 Bush Avenue, St. Paul 6, Minnesota.

The catalog contains descriptions and applications for both "Scotch" and and "Irvington" brand electrical products for splicing and terminating wires and cables.

Products included are electrical splices, connectors, splicing kits and materials, epoxy resins, insulating fillers, telephone splice sleeves, moisture vapor barrier materials and insulating putty, arc proofing and high voltage splicing materials.

Application information, product description, ordering information and properties on the various insulations are provided in the body of the catalog.

The new catalog may be obtained by writing to 3M at the above address.

Computer Used to Design Transformer Producing Radar Pulses

USE of a digital computer to design a pulse transformer, thus reducing calculations from days to minutes, was reported at the Winter General Meeting of the American Institute of Electrical Engineers held in New York City recently.

Pulse transformers are relatively new and are used for pulsed radar, and P. L. Logo, R. L. Greene and M. Lonic, Jr., of Westinghouse Electric Corp., in a paper, Digital Computer Design of Pulse Transformers. Prior to use of the digital computer tedious and time consuming calculations were necessary.

Advantages of the computer use in addition to reduction of calculating time were listed as: Providing, in addition to the final design, all of the intermediate design values calculated while iterating towards a final design; enables the design engineer to study the effects of parameter variation on transformer design; it releases the design engineer from the drudgery of routine calculations; it insures consistency of design procedure and should allow the manufacturer to give rapid quotes on proposed designs; and it should allow faster delivery service because of the reduction in engineering time.

Pulse transformers transform energy in a pulse with an approximately rectangular shape and time duration in the order of micro-seconds, the engineers pointed out.

World's First Inner-cooled Transformer Installed

THE world's first inner-cooled transformer, built by Westinghouse Electric Corporation's power transformer department in Sharon, Pa., is now installed and operating on the system of New York State Electric and Gas Corporation. The unit is located at Hinman Road substation, Lockport, N. Y.

In the new inner-cooled design, the oil is circulated between the strands of parallel conductors that are at the same potential. Thus, oil ducts are eliminated between coils and windings. This allows the use of materials having higher insulation strength than oil where voltage stresses occur. In this manner, smaller, lighter, and higher capacity units can be built that have the same design margins as the conventional construction.

This 30-, 40-, 50-mva, OA/FOA/-FOA, 115-kv transformer weighs 3.1 pounds per kva, compared to 3.5 pounds per kva for a similarly rated conventional unit.

Potomac Edison Has 3-Year Construction Program

THE Potomac Edison Company, Hagerstown, Md., has announced a budget of almost $23,000,000 for expansion of generating, transmission, distribution, and general service facilities during 1959, 1960 and 1961.

The construction budget for the current year calls for an outlay of over $7,000,000. Construction budget forecasts for 1960 and 1961 call for expenditures of nearly $7,500,000 and over $8,000,000 respectively.

Largest single outlay during the three-year period will be for construction, extension and improvement of the company's transmission and distribution line facilities. Over $14,-000,000 has been allocated for this purpose.

Two major transmission line projects are scheduled for 1959. A new 132,000 volt line will be built from Millville to Frederick, a distance of 26 miles. This line is actually a continuation of the Albright to Millville line. It will provide additional capacity for the fast growing east portion of the PE service area and supply possible power feed-back into the Hagerstown and Waynesboro areas.

An additional source of power will be furnished the Martinsburg area with the construction of a 132,000 volt line from Marlowe to Opequon Substation near Martinsburg, a distance of 14 miles.

In 1960 a new 132,000 volt line, 27 miles in length, is scheduled to be constructed from Riverton to Luray. This line is required to meet the growing power demands in the Southern district.

A new 132,000 volt line, slated for construction in 1961, will be built from the proposed Millville-Frederick line into the Montgomery County area. To meet the rapidly growing needs of this area, and also furnish additional power to the lower portion of Frederick County, a 15 mile spur line will be tapped from the Millville-Frederick line.

Iowa Electric Light & Power to Spend $13,000,000 in 1959

OVER $13,000,000 have been budgeted by Iowa Electric Light and Power Company, Cedar Rapids, Iowa, for construction during the 1959 year —over $5,000,000 more than for construction in 1958.

Largest single item in the new $13,300,000 budget, which will cover construction in some 375 communities, is $3,700,000 toward the third generating unit for the Sutherland station at Marshalltown. This new 82,500-kw unit will cost a total of approximately $13,000,000, with the major portion of the outlay coming in 1960.

Gas distribution systems for some 21 new towns have an estimated expenditure of $1,600,000. These are the towns in which the company holds franchises and is awaiting Federal Power Commission approval for service.

An over-all picture of the new budget shows $9,740,000 allocated to activities of the Electric Department over the property, including the expansion planned for the Sutherland station.

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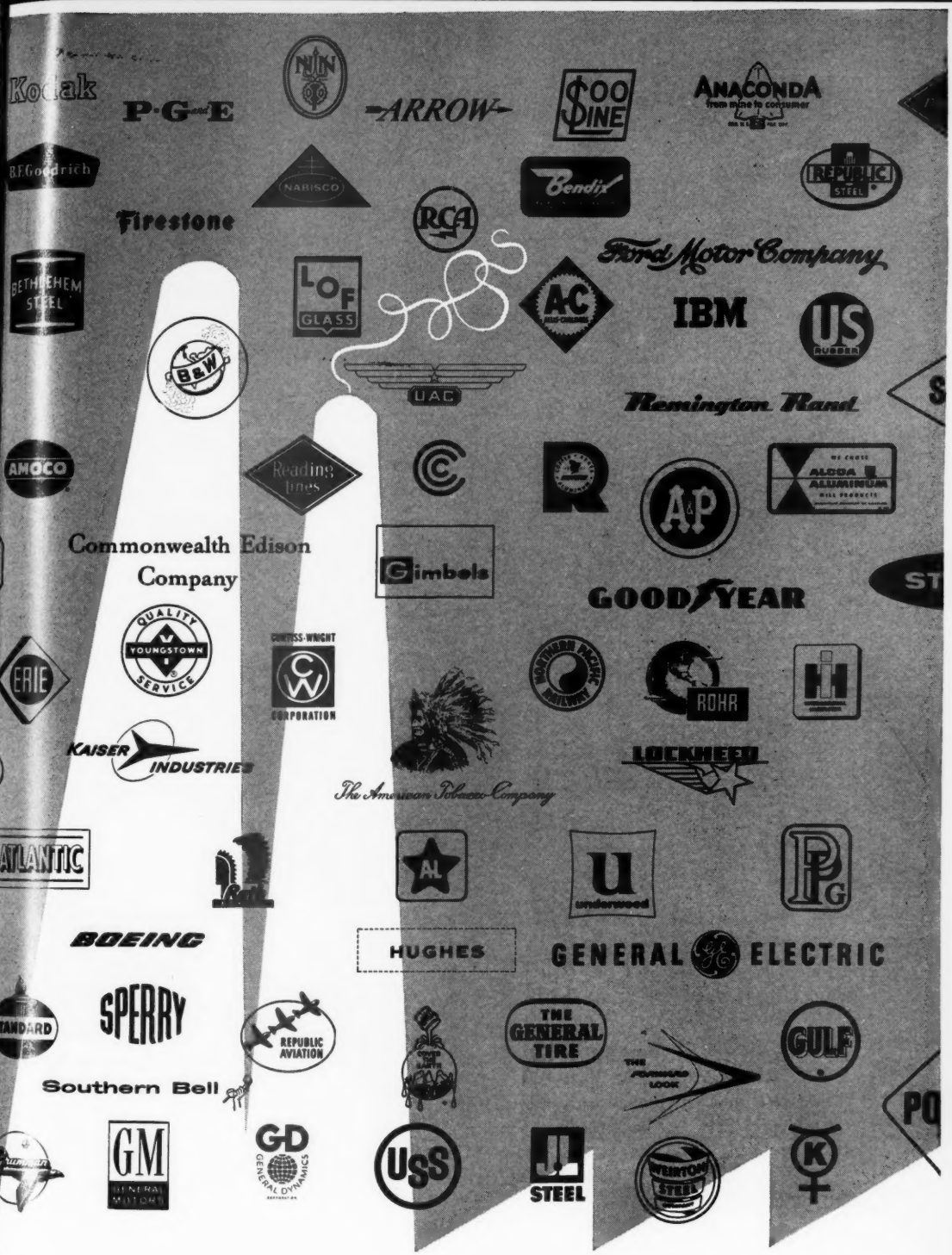
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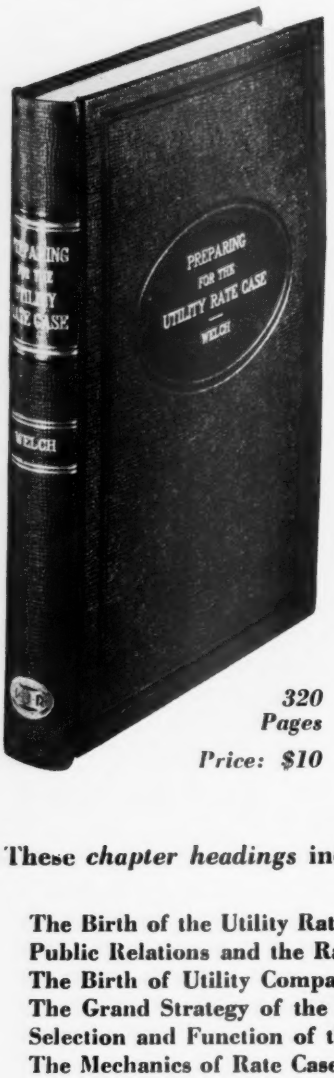
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PREPARING FOR THE UTILITY RATE CASE

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The satisfactory solution of the most expensive and difficult problem of Commission Regulation – The Rate Case—depends very largely upon how well and how thoroughly the details of ***preparation*** have been given attention. "Preparing for the Utility Rate Case" is a compilation of experiences taken from the records of actual rate cases. It has required two years of research, study and analysis, conducted by Francis X. Welch, Editor of PUBLIC UTILITIES FORTNIGHTLY, with the aid and cooperation of selected experts, to complete this treatise.



320 Pages
Price: $10

The volume, being the first of its kind, should be found invaluable to ***utility executives, rate case personnel, attorneys, accountants, consultants, regulatory commissions, rate case protestants,*** and, in fact, to all persons engaged in or having an interest in rate cases.

Among the values of this compilation are the reviews of methods and procedures, which have been found helpful in –

- **simplifying and speeding up rate case groundwork**
- **saving time and expense of companies, commissions and other parties**
- **cutting down "lag losses"**
- **aiding the consumer by making possible faster plant and service improvements**
- **increasing the confidence of investors**

—all of which are in the public interest.

The volume does not offer a program of standardized procedures for rate case preparation, but ***reviews*** the ***plain*** and ***practical methods that have been used.***

These *chapter headings* indicate the coverage:

The Birth of the Utility Rate Case
Public Relations and the Rate Case
The Birth of Utility Company Rate Opposition
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Operating Expenses
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CONDUCT OF THE UTILITY RATE CASE

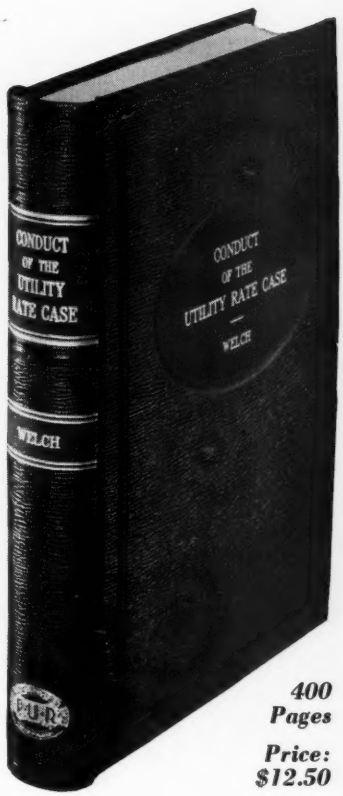
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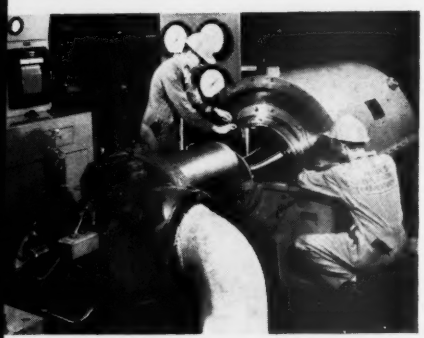
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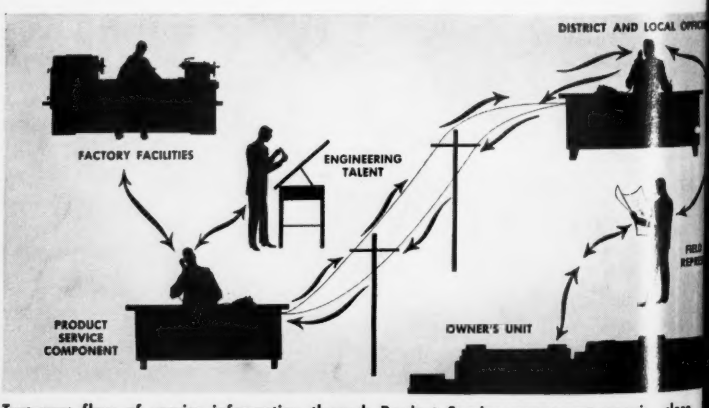
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